Commission of Inquiry
into
Residential Tenancies

Ontario

Rent Regulation, Housing Affordability Problems, and Market Imperfections

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John Miron

Research Study No. 9

RENT REGULATION,
HOUSING AFFORDABILITY PROBLEMS,
AND MARKET IMPERFECTIONS

by

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INTRODUCTION

Affordable housing is a major government housing goal and a major public concern. There is a general view that people have a right to housing, that "the right to housing" means more than just the right to shelter, and that one part of the "more" is that housing should be affordable. In this paper we examine the notion of housing affordability, the extent of affordability problems in Ontario, and the contribution of housing market imperfections to these problems. However, this paper's primary aim is the assessment of policies for ameliorating affordability problems. One of these is the Ontario Rent Review program.[1] Does it work? The answer, we find, is that it does -- but only marginally and only for selected groups of people. We suggest an alternative rent regulation program and other policies that together would do more good and cause less harm.

We begin by examining the nature of housing affordability problems and suggest why they are a matter for

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public concern. Next we discuss moving costs, defined broadly, and their relation to affordability problems. In the following section we use the criteria for an affordability problem, put forward earlier, to assess the distribution of households in Ontario with affordability problems and the changing extent of the problem over time. Our next step is to put forward the criteria for assessing affordability policies. We then discuss some policies that involve regulations or minor expenditures rather than direct subsidy -- in particular, policies for dealing with market imperfections. We then examine, in turn, the Ontario Rent Review program and an alternative rent regulation program. Finally we examine subsidies targeted at the needy: first, production-based housing subsidies, and then cash rent and income subsidies.

THE NATURE OF AN AFFORDABILITY PROBLEM

Definition of an Affordability Problem

A household may be said to have a housing affordability problem if it spends too much on housing. In this paper, housing expenditure is expressed as a percentage of household income and we consider only renters.[2] Therefore a household with an affordability problem is one whose rent is too high a percentage of its income.

Rent is expenditure on housing service, and just as expenditure on, say, milk may be expressed as the price

times the quantity of milk, so rent may be expressed as the price times the quantity of housing service:

$$R = p_h q_h. \quad (1)$$

The price of housing service, p^h, is the price of some arbitrary standard unit of housing service. If from one period to the next the rent of an apartment doubles and the apartment does not change in any way, then it can be said that the price of this housing service has doubled. The quantity of housing service, q^h, is the quantity of housing service in terms of the standard unit. If the rent of an apartment increases and this increase is merely a reflection of renovations or other improvements in the housing services yielded by the apartment, then it can be said that the price of housing service has not changed, only the quantity. Further, if a household moves in a housing market in which there is a single price of housing service and the rent of the new apartment is twice that of the old, then the household is said to be consuming twice as much housing service.

Thus an affordability problem exists when the rent-to-income ratio is too high or, equivalently, when

$$p_h q_h / y \quad (2)$$

is too high, where y is the household's income. It can be easily seen from (2) that the rent-to-income ratio will be too high if income is too low, or if the price of housing service is too high, or if the quantity of housing service is too high. Accordingly, one way of solving an

affordability problem is by simply giving the household more income; if its rent does not change, its rent-to-income ratio necessarily will fall. Or the government might intervene in the housing market to lower the price of housing. Or the household might be persuaded to consume less housing service.

A Matter for Public Concern?

Why should an affordability problem be a matter of public concern? One possible answer is that the question is inconsequential: affordability problems clearly do concern the government and analysts should take this social value as a given. But this answer is too easy; we do not believe the question should be left unexamined. It may be tackled conveniently by first asking why the rent-to-income ratio should be of any more concern than the food expenditure-to-income ratio. The answer lies in some characteristics of housing.

First, housing expense is a relatively fixed expense. It is difficult and expensive to change when circumstances change. A household head who loses her job can quite easily buy beans and hot dogs for her children instead of roast beef. It will not be so easy for her to reduce her housing consumption. She will have to search for new accommodation, and if she is lucky enough to find lower-rent housing she will then have to incur both the expense of moving and the associated disruption -- which may be considerable if her

children have to change schools. The transaction costs associated with the purchase of food are quite trivial, but those associated with the purchase of housing service are substantial.

Second, while any poor household[3] has the option of switching to a monotonous -- but still nutritious -- diet, in which beans and grains largely replace meat, lower-rent housing may simply be unavailable. It may be unavailable because landlords perceive the household as one costly to deliver services to: many landlords refuse to rent to households -- especially low-income households -- with children. Or it may be unavailable because building and housing-standard regulations do not permit low-quality housing. The quantity of housing service that the household would regard as affordable the community may regard as unsafe or not decent for its occupants, or as too unsightly or unsafe to be tolerable by neighbours.

Given that the rent-to-income ratio should be of more public concern than the food-expenditure-to-income ratio, why, still, should it matter? In the case of low-income households, the answer is clear (see Fallis 1984). If they spend too much on housing, there will be too little money left to spend on food, clothing, and other necessities. If all households are assured a minimum income through such schemes as Old Age Security and the Guaranteed Income Supplement, households that pay a relatively high price for housing service or that are trapped in over-housing will have a lower minimum standard of living than others, other

things being equal. The answer is less clear in the case of households above the poverty line but below twice the poverty line (median income is approximately twice the poverty line). It can be said, however, that a relatively high rent-to-income ratio for these households will to some extent defeat the equity goals of the income tax system, because marginal tax rates depend on income and do not take into account the effect of a relatively high price of housing service on the standard of living of a household with a given income. For the third group of households, those above median income, there is likely to be little availability problem and transactions costs will not be an important barrier. The case for policy concern if such households have a high rent-to-income ratio is very weak, unless the high ratio is a manifestation of some other problem of policy interest.

Issues in Specifying Affordability Criteria

If we assume that the high rent-to-income ratio of some households may be a matter of legitimate concern for public policy, two questions follow: How high must the ratio be to qualify as a problem? What is the nature of the households for which the high ratio is a problem?

The traditional acceptable ratio is 25 per cent, a ratio justified in the nineteenth century by the formula "a week's wage for a month's rent" (Lane 1977). It is the ratio enshrined in public housing rules: 25 per cent of

income is the maximum rent in the federal public housing rent scale (Archer 1979, Table 2.1). This provision is important for two reasons. First, for horizontal equity it implies that households that are income-eligible for public housing should not pay rent in the private market of more than 25 per cent of income unless they are voluntarily consuming more housing service than a public housing unit delivers. Second, so long as government policy reflects the values of its electorate, the public housing rent scale implies that the electorate believe that a rent-to-income ratio of more than 25 per cent represents a problem. Apparently contrary to these two points, however, are the provisions of the housing allowance programs in British Columbia and Quebec, which require households to spend 30 per cent of income on rent before they become eligible for assistance.

The discussion so far has implicitly assumed that there should be a single affordability criterion. However, the fundamental rationale for regarding a high rent-to-income ratio as a problem implies that the affordability ratio should vary by household size. Large households must spend more money than small ones on food, clothing, and other necessities in order to achieve the same standard of living. Leslie and Steele (1984, Table 13) estimate that a household of two adults plus a child needs to spend 22 per cent more on food and 29 per cent more on clothing than a household of only two adults. Thus, at a given income level, the larger is the household, the less it can afford to spend on

housing. Therefore, the affordability ratio should be smaller for large households than for small ones.

Some direct evidence related to this point is assembled in Table 1, taken from Steele (1984). It shows rent-to-income ratios for various sizes of households with a poverty-line income.[4] The Ratford set shows ratios calculated from model budgets developed by social service experts to show the expenditure required for an "adequate standard of living." The other two sets of ratios are behaviourally rather than normatively based; that is, they are based on what households actually do spend rather than on what they should spend. It is noteworthy that all three sets show a much lower ratio for a two-person household than for a single-person household; ratios continue to decline, albeit more slowly, as household sizes increase. Indeed, the pattern of these ratios provides something of a resolution of the seeming inconsistency between the 25 per cent public housing rent-to-income ratio and the 30 per cent housing allowance contribution rate in British Columbia and Quebec. All three sources in Table 1 show a ratio for a five-person household at least 5 percentage points less than the ratio for a two-person household. Now the housing allowance programs in British Columbia and Quebec assist only the elderly, virtually all of whom are in one- or two-person households. It is thus appropriate that the contribution rate under these programs should be 5 percentage points higher than the maximum ratio in public housing,

TABLE 1

Alternative Estimates of Rent-to-Income Ratios at the Poverty Line

Size of Household	Stevens	Steele	Ratford
1	.39	.44	.38
2	.31	.34	.28
3	.27	.29	.27
4	.26	.26	.23
5	.25	.24	.23
6	.22	.23	.21

SOURCES:

Stevens: Stevens 1979, Table 28, 81, estimated ratio at poverty line in Winnipeg.

Steele: Computed from the regression for Toronto CMA renters with 1970 income less than $7,500 (Steele 1979, Table 7.8, 194). For estimation of rent, measured income is 1970 Statistics Canada revised low-income cut-off, and this is divided into permanent and transitory income components by taking the ratio of permanent income to observed income as equal to the ratio of regression sample means. In addition, the person constituting the one-person household is assumed to be female, aged 70, and not single, and to have seven years of education. The head of the two-person household is female, aged 35, and not single, and has ten years of education and one child. For other household sizes, the head is a married male, aged 35, with nine years of education, and the other household members are one adult and a child or children. For the ratio computation, 1970 poverty-line income is inflated to 1971 using average hourly earnings in manufacturing.

Ratford: Computed from data in Municipality of Metropolitan Toronto Planning Department 1980 <u>Housing in Metropolitan Toronto, Affordable or Not?</u> Rent is taken from rents given, p. 18. Income is "minimum income required to afford a basic shelter package", Table 3, p. 19, for one- and two-person households and Appendix 4B, p. A12 for other sizes. The ratio given here for a one-person household is for an elderly person; for two-person households the ratio is for one adult and one child; for households of three and more persons, it is for two adults and a child or children.

where occupants are frequently three- to five-person families.

There are also good grounds for varying the affordability criterion by income. The higher is income, the greater is the percentage of it that can be spent on housing without jeopardizing expenditure on other necessities. This implies that the higher is income, the higher should be the rent-to-income affordability criterion. Thus, if the affordability criterion for a couple is 30 per cent at a poverty-line income, it should be greater than 30 per cent at the median income. There is an analogy here with the marginal tax rate, which is higher at the median income than it is at the poverty-line income.

The Affordability Criteria Used in This Paper

We pointed out above that a traditional affordability criterion has been a rent-to-income ratio of 25 per cent. In addition, we argued that the larger the household is, the lower the ratio should be. For the purpose of this paper, we use a set of rent-to-income ratios that are a stylized approximation of those indicated for poverty-line incomes in Table 1. We specify a ratio of 25 per cent for a three-person household; the complete array is 40, 30, 25, 22.5, and 20 per cent for households of one, two, three, four, and five or more persons respectively. In other words, for the traditional household -- two parents with a child or children -- the ratio is no higher than the traditional one, but for the kind of household that rarely existed in the

nineteenth century -- or even a few decades ago -- the ratio is higher. The ratios are not varied by income. For households with an income below the poverty line, this will not make much practical difference. The income elasticity of demand for housing is so low[5] that the great majority of unsubsidized households below the poverty line spend a higher proportion of income on rent than the typical unsubsidized household at the poverty line. For households above the poverty line, the use of ratios invariant to income does overstate the number of households with an affordability problem, to the extent that the single set of criteria used is in fact appropriate for poverty-line households. But if the electorate were to regard 40 per cent for a single-person household and 30 per cent for a two-person household as unacceptably high rent-to-income ratios at the poverty line, then the numbers in the group between the poverty line and twice the poverty line might not be too large.

MOVING COSTS AND AFFORDABILITY PROBLEMS

We argued above that housing affordability problems should be a matter of concern for public policy in part because of the importance of the transaction costs associated with changing housing consumption through moving. We term these costs "moving costs" and use the phase to refer to <u>all the psychic and monetary</u> costs associated with a move: search and information costs, the costs of the physical move

itself, decorating costs, and other adjustment costs at the new location. Moving costs may cause affordability problems for low-middle-income and low-income renters if they are so high that they stop a move to more affordable accommodation.

Too few data are available to allow a direct estimate of the quantitative importance of moving costs, especially search and information costs and adjustment costs, but there are indirect indications that they are important, particularly for certain groups, such as the elderly. First, only because of the existence of moving costs -- as broadly defined here -- is security of tenure per se of value, and yet security of tenure is of sufficient concern to be the subject of provisions in the Residential Tenancies Act. Second, housing studies commonly show that households adjust to changes in underlying demand only with a very long lag (see, for example, Hanushek and Quigley 1979), and this lag is consistent with the existence of substantial moving costs (as broadly defined here). Finally, there is indirect survey evidence. When elderly housing allowance recipients surveyed in Manitoba were asked what they would do if the allowance were eliminated, most responded that they would cut their food expenditure (Minuk and Davidson 1981). That is, to avoid a move into cheaper private accommodation or into cheap public housing for the elderly, they would cut expenditure on the first necessity of life, food.

For high-income households, too, moving costs tend to delay adjustment to changed conditions and, of course, tend

to make a household that moves worse off than a household with the same income that does not move. Do these conclusions have any implications or relevance for public policy? The answer depends on the nature of the move. If the move is a voluntary one, such as one made because of a job change, there is clearly no case for public concern. The costs of the move are undertaken voluntarily -- indeed, they are tax deductible if associated with a job change -- and a rational consumer will only undertake a job change if its benefits outweigh the costs of the move. Involuntary moves are a different matter. While the Residential Tenancies Act protects renters of all income classes against certain kinds of arbitrary eviction, it does not protect tenants against all kinds of eviction. Specifically, it does not protect them from eviction if the building they occupy is to be demolished, renovated, or converted to commercial use, or if the landlord wishes to occupy the dwelling himself. A final point, and the most relevant one for the purposes of this paper, is that only the rent review provisions -- not the eviction provisions -- prevent economic eviction, and thus households in premises exempt from rent review are not protected. Economic eviction is defined here as a move caused by unconscionably large rent increases. Such increases may to some extent represent the exercise of limited monopoly power by the landlord -- power conferred on the landlord in some cases by the existence of moving costs. A rational household will not move out if the present value of the difference between the rent of its

current accommodation and the market rent of equivalent accommodation is less than its moving costs. Thus some instances of high rent-to-income ratios among households above the poverty line may reflect attempted economic eviction. For this reason, the rent-to-income ratios of relatively high-income households are of some interest, as well as the ratios of lower income households.

AFFORDABILITY PROBLEMS AMONG ONTARIO RENTERS

Who Has an Affordability Problem?

How extensive are affordability problems among Ontario renters and which renters tend to have them? Our definition limits affordability problems to households below twice the poverty line. Table 2 shows that about half of all low-income households have an affordability problem while the overwhelming majority of low-middle-income households do not. This is a reminder that low income is a major source of affordability problems.

A somewhat surprising aspect of Table 2 is its indication that the incidence of affordability problems among low-income renters is not much greater in large urban areas than elsewhere. This suggests that the higher rents in large urban areas are offset by higher incomes, even among the low-income groups.[6] It is also possible that rents in Toronto and other large urban areas are not as high

TABLE 2

Renters with Affordability Problems in Ontario, 1982[a]

	Urban Centres with Population of 100,000 or More		Other Urban Areas		Rural Areas	
	$Y<P$	$P<Y<2P$	$Y<P$	$P<Y<2P$	$Y<P$	$P<Y<2P$
All Renters						
Incidence	49.2%	11.2%	51.3%	9.7%	(58.3%)	3.8%
Number ('000)	91.7	30.4	31.4	7.9	4.9	0.5
Family Renters						
Incidence	61.2%	12.6%	66.7%	11.2%	[69.8%]	[6.0%]
Number ('000)	33.4	13.1	17.2	4.0	4.2	n.a.
Elderly Renters						
Incidence	32.8%	10.6%	13.4%	16.6%	n.a.	n.a.
Number ('000)	20.7	5.7	n.a.	n.a.	n.a.	n.a.

a Weighted estimates for renters have been computed using 1982 Household Income, Facilities and Equipment Micro Data file, 1981 Incomes. Parentheses indicate that the estimate is based on 25-49 observations; brackets indicate 10-24 observations; "n.a." indicates fewer than 10 observations or an estimate of fewer than 4,000 households. An affordability problem is taken to exist if the rent-to-income ratio is > 40% for a one-person household, > 30% for a two-person household, > 25% for a three-person household, >22.5% for a four-person household, and > 20% for a household with five or more people. A family is defined as any household with head under 65 and with at least one person less than 18. An elderly household is defined as a household with a head 65 or older.

Y refers to 1982 household income; it was estimated by projecting forward 1981 income given in the HIFE data base on the basis of the increase in average hourly earnings in manufacturing. P refers to the 1982 Statistics Canada low-income cut-off (1978 base); note that it is designed for use with family data although it is used here for households.

as they would be in the absence of rent review, but that rents in other areas have been little affected by rent review.

While the incidence of affordability problems is high among low-income renters of all types, it is much higher among families than among the elderly -- 61 per cent as compared with 33 per cent in large urban areas.[7] For low-middle-income renters, however, the differential is much less, perhaps because more of the low-middle-income elderly are just barely above the poverty line.

The incidence of high rent-to-income ratios among upper-income renters (those above twice the poverty line) is not shown in Table 2 because by definition they cannot have an affordability problem. However, in view of the arguments in the preceding section, it is worth noting that less than 1 per cent of such renters have ratios high enough to be regarded as a problem if observed among lower-income groups.[8] This figure suggests, at the least, that any monopoly power that landlords may possess has not resulted in severe hardship for upper-income renters.

Affordability Problems over Time

What has the pattern of affordability problems been over time? As Table 3 shows, the number of households with affordability problems declined substantially over the period 1976-82; this point applies to both family renters and elderly renters. In large urban centres, the number dropped by 33 per cent to 122,000. In the other areas it

TABLE 3

Number of Renters with Affordability Problems, 1976-1982, Ontario[a]

	Urban Areas with Population of 100,000 or more				Other Urban Areas, Rural Areas			
	(1969-base poverty line)		(1978-base poverty line)		(1969-base poverty line)		(1978-base poverty line)	
	1976	1980	1980	1982	1976	1980	1980	1982
	('000)		('000)		('000)		('000)	
All renters	182.1	153.4	156.7	122.0	43.1	44.0	44.0	44.8
Family renters	76.7	60.7	60.7	46.6	23.4	19.4	19.4	25.9
Elderly renters	41.6	37.6	39.3	26.4	(7.9)[b]	8.3[b]	8.3[b]	5.3[b]

a Weighted estimates for renters computed using 1976 Household Income, Facilities and Equipment Micro Data file, 1975 Incomes; 1980 HIFE, 1979 Incomes; and 1982 HIFE, 1981 Incomes. Parentheses indicate that the estimate is based on twenty-five to forty-nine obervations. An affordability problem is defined to exist if the criterion given in Table 2 is satisfied and if household income is less than twice the poverty line. Household income for 1982 is estimated as given in Table 2 and for other years is estimated analogously. The poverty line is taken as the Statistics Canada low-income cut-off; "1969-base" refers to the cut-off based on 1969 family expenditure data and "1978-base" to that based on 1978 family expenditure data. Note that the cut-off is designed for use with family data although it is used here for households.

b "Other urban areas" only.

rose very slightly. Data computed on a somewhat different basis in Miron and Cullingworth (1983, Table 7.10) indicate that the number of households with an affordability problem rose strongly between 1972 and 1976, and that the reversal in trend occurred between 1976 and 1978.

Why did the decline occur? Part of the answer is a rise in the real income of low-income households. The proportion of renters with real income below the 1976 poverty line[9] fell substantially between 1976 and 1982, reflecting the widespread indexing of government transfers such as Old Age Security payments and the substantial rise in Canada Pension Plan payments, among other factors.

A second reason why the importance of affordability problems declined between 1976 and 1982 is that for both low- and low-middle-income households the price of housing service rose less than income over this period. The increase in the rent component of the CPI between 1976 and 1982 was only 37 per cent in Ottawa and Toronto and 29 per cent in Thunder Bay, much less than the rise in the overall CPI. Thus this period saw a sharp fall in both the real price of housing service and the price of housing service relative to disposable income per capita -- which in Ontario rose by 89 per cent.[10]

Another factor in the decline in affordability problems between 1976 and 1982 was the increased amount of social housing provided during these years.[11]

The decline in affordability problems may have also reflected a reduction in the housing consumption of low-

income households. Doubling-up may have occurred, and the housing consumption per capita of continuing households may have declined. But neither development is likely, since there is evidence that the incidence of crowding actually declined between 1976 and 1982.[12] However, a rise in consumption per capita at or close to the margin does not rule out a decrease among other households.

One final observation is worth making. Over this period, as Table 3 shows, there was a change in the geographical distribution of renters -- especially family renters -- with affordability problems. This change in large part reflects a change in the distribution of households below twice the poverty line. While the number of such households in large urban centres fell, the number in smaller places changed little or even increased. If the change in numbers had been proportionately the same in all areas, then the observed incidence of affordability problems would have been greater because of the higher price of housing service in larger places. The change in distribution may have come about because low-income households -- especially newly formed households -- deliberately sought out the lower-rent accommodation available in smaller places. If this movement from the cities resulted in more commuting than there would otherwise have been, then some of the drop in the number of households with affordability problems may be associated with a rise in commuting costs.

AFFORDABILITY PROBLEMS AND PUBLIC POLICY

As we pointed out earlier, an affordability problem can have a number of root causes. Different causes call for different public policy solutions. Indeed, in one situation there is no case at all for public intervention. This is when an affordability problem arises because a household is willingly consuming housing service at a higher than standard level or is willingly living at a high-priced location, where "willingly" means that even if moving costs were zero the household would not lower its consumption or change its location.[13] A household that freely elects to be overhoused or to live at a prime location should not expect public assistance even if its choice results in an inadequate amount of funds for food and clothing. On the other hand, there is a case for public intervention when the problem arises for other reasons. The wide range of possible reasons is reflected in the wealth of policy options for dealing with affordability problems. These options are presented and assessed below.

One criterion is economic efficiency. Would the people gaining from the implementation of a policy gain more than the losers would lose? If so, the policy is more efficient than the reference policy.

Another criterion is equity. What distribution of benefits arises from a given policy? Are benefits distributed to the neediest? We also consider the feasibility of the policy. While we do analyse some policies that

do not have a good chance of public acceptance, in order to provide balance and perspective, policy recommendations must take into account political and administrative constraints.

HOUSING MARKET IMPERFECTIONS, AFFORDABILITY PROBLEMS, AND GOVERNMENT INTERVENTION

Limited Monopoly Power and Public Policy

Affordability problems arise when the price of housing service is too high. Conceivably, it might be too high because of the existence of imperfections in the rental housing market -- in particular, the existence of monopoly power. In fact, landlords probably have little power over the market rent of a standard dwelling unit -- the median rent, for example, of a one-bedroom apartment in the central part of a city. This is so for two reasons. First, in any large city there are thousands of landlords; a few own large high-rise buildings and a large number own smaller buildings,[14] including single-family homes converted into duplexes and triplexes. Thus, no individual landlord can perceptibly influence market rent. Second, there is free entry into the rental housing industry.[15] Established landlords have no power to stop developers from erecting new buildings, and the existence of a well-developed mortgage market means that the equity capital requirements for entry are small. Additional accommodation can also come onto the market through the conversion of single-family homes into

duplexes and triplexes, a process that often involves no more than the erection of a single wall and the installation of a door, or the conversion of a basement recreation area into an apartment. Freedom of entry means that if increased demand for accommodation pushes market rent above its long-run equilibrium level -- that is, above the level required to cover costs and provide a normal return -- the creation of additional dwelling units through new construction or conversion will ensure that this rent cannot persist for very long.

Although it is unlikely that landlords have any perceptible power to affect market rent, a landlord may have perceptible monopoly power with respect to his particular units. This situation may arise for two reasons. First, the landlord's units may have unique structural features -- for instance, they may be the only ones available with a fireplace. However, such features are relatively easy to add if there is a demand for them. A more important factor is location. The units may be the only ones in a particularly desirable neighbourhood. But it is questionable whether even locational advantage confers significant monopoly power. Zoning rules or other problems may make it difficult to build new units in the desirable neighbourhood, but they will generally not prevent their construction in locations that are close substitutes.16

Relaxing Zoning Rules

Still, this discussion makes it clear that one policy that can help the affordability problem is a reduction in zoning constraints on new rental residential construction or conversion.[17] One advantage of relaxing constraints on conversion is that conversion has less effect than construction on the appearance of a neighbourhood and for this reason may have less effect on the values of neighbouring properties. Moreover, in Toronto and other large cities, the victims of any crackdown on illegal conversions are likely to include many households with affordability problems.

Moving Costs

A second possible source of landlord monopoly power is the existence of moving costs. A rational tenant will not move in response to a rent hike unless the present value of the difference between his new rent and the rent of a similar alternative unit is less than the moving cost (defined broadly). This gives the landlord the power to set the rent of his unit above that of a similar alternative. On the other hand, the landlord does not generally know either the tenant's moving cost or the present value of the rent differential, in part because the latter depends on the length of time the tenant intends to continue occupying the unit. Further, the landlord incurs costs if a tenant leaves -- advertising, management, redecorating, and other adjustment

costs, and perhaps vacancy losses. If the tenant understands this, he may be able to bargain for a rent lower than that of a similar alternative.[18] Thus the situation has elements of bilateral monopoly, not simple monopoly. Indeed, the widely observed phenomenon (see, for example, Kain and Quigley 1975, Merrill 1980) of rent discounts associated with length of tenure indicates that on balance there is a gain from being a sitting tenant.[19] Thus, there is no reason in general to expect landlords to exploit sitting tenants because of the power conferred on them by the existence of moving costs, although it may happen in some instances.

Imperfect Information and Public Policy

Another housing market imperfection is imperfect information. This may be the source of an affordability problem if it results in a household's paying a premium price for housing service. The possible importance of imperfect information is indicated by the wide range in the prices of housing service in a given market. Some variation in the rent paid for similar units is clearly to be expected in a market where there are units under rent control alongside units not under rent control. But even when there is no rent control, there is wide variation. Staranczak (1978) found that only 53 per cent of the variation in the rents for modest units in Ontario in 1971 was explained by characteristics such as size and location. Further, in a very careful study that paid great attention to identifying any

possible quality variable that might explain otherwise unexplained differentials, Friedman and Weinberg (1982) concluded that a substantial amount of rent variation is indeed attributable to price variation; that is, a substantial part of the differences in rent in their sample was[20] attributable not to differences in the size or quality of units but rather to differences in rents paid for units of similar size and quality. Some households get bargains and others pay a premium.

This discussion points to a policy of assisting low-income households' search for bargain units. In fact, agencies such as the Children's Aid Society already give some housing-search assistance in connection with their social service work. But this kind of assistance -- having a social worker help with search -- is costly. A less costly method of assistance would be the establishment of a list of available accommodation. The list would indicate rents and provide information such as whether or not a landlord was willing to rent to households with children. Such a list would be highly useful if it were aggressively maintained. In some centres, profit-seeking agencies already offer lists of this kind, but low-income households may find the charge for the service difficult to afford. Free lists are currently available to students through the housing service departments of universities. A listing service could be set up as a department of a municipal housing agency such as Toronto's Cityhome, using the university service for a model.[21] Such a service might be

positively attractive to small landlords if it undertook to confine users of the list to creditworthy households with acceptable records as tenants. Screening may be too difficult or too expensive for small landlords to undertake, but it is apt to be very important to them, especially in view of the legal and other difficulties associated with the eviction of bad tenants. Of course, there would have to be safeguards to protect possible users of the list against unfair exclusion. It should be noted, however, that landlords who advertised their units in the newspaper would in principle have no way of determining whether or not a potential tenant had been favourably assessed by the housing agency, so long as the agency did not release this information.

The use of public funds to provide such a list is an attractive policy. It would probably be economically efficient because a single agency should be able to provide information much more cheaply than tenants and landlords acting separately, and it would probably be equitable because the service would be provided largely to low-income households. Indeed, it hardly seems fair that students, who have the prospect of a high-income life ahead of them, receive this kind of service free from publicly subsidized institutions and low-income families do not.

The effectiveness of providing lists and other information to low-income households is supported by evidence from the Experimental Housing Allowance Program in the United

States. While evidence from EHAP suggests that housing bargains are usually obtained through personal contact rather than diligent search (Leigh 1981), enrollees appear to have both wanted and used information services, and these services have indeed helped them find better housing. The services have been especially helpful to households likely to encounter racial discrimination (Zais 1981), which suggests that in a Canadian context they would be especially useful to households with children. Furthermore, information services were found to be clearly more effective than traditional social work services -- that is, problem-responsive services that provide help to households as it is needed.

Discrimination in Rental Housing Markets, High-Cost Households, and Public Policy

Some households may have an affordability problem because they are the victims of discrimination. One policy for dealing with this situation is human rights legislation that prohibits discrimination. Ontario does have legislation that protects minority-race households, although it is possible that its enforcement is not vigorous enough to provide very good protection.

Reducing the Cost of Serving High-Cost Households

Other households may have affordability problems because their payments for housing service include a premium that is based not on discrimination, but rather on an assessment

that they are high-cost tenants. In this paper, a premium price of rental service will not be taken as discriminatory if the household belongs to a category of households that is costly to serve. In this case, the premium is a rational response on the part of the landlord and is economically efficient for the category as a whole, so long as it is equal to the difference, at the margin, between the cost of delivering service to a standard tenant and the cost of delivering it to a tenant in the category under consideration. For instance, if, on average, low-income households led by single-parent mothers impose greater maintenance costs and bad-debt losses on landlords than do standard tenants, it is economically efficient to charge them a higher rent.

Ideally, only those who were actually high-cost tenants, rather than all those who were members of a category that was costly on average, would be charged premiums. But if it is too expensive (or if it is impossible) to perform the individual-by-indvidual assessments required to implement the ideal, then the economically efficient policy is differential charging according to category. There is an analogy here with ratings for car insurance purposes: ideally, each driver would be charged according to his individual risk, but instead drivers are charged a premium if they belong to a category that on average has high claims. Of course, there will be inequity in a policy of charging a premium by category, because the members of the

category will not be exactly alike. But there will also be inequity -- as well as economic inefficiency -- if there is no differential charging whatsoever. For instance, it would not be fair to charge low-income elderly tenants the same rent as single-parent families if it cost more to provide service to the latter than to the former.

Further, the inequitable aspects of differential charging will be more than offset if the income tax and social security systems recognize that members of high-cost categories who are charged higher rents than standard households need more money than standard households to reach a given standard of living. An analogy with food expenditure is useful here. A mother and child may require more food than a standard household, but no one expects the grocer to charge the two households the same total amount, irrespective of the amount it costs him to supply them. On the other hand, the fact that different households need different amounts of food should be -- and to some extent is -- recognized by government policy.

Two kinds of policies could efficiently reduce the premiums that households in a "bad tenant" category pay. First, policies could be put in place that would make such households 'better' tenants. For instance, the provision of childcare and youth programs in local schools and recreation centres might reduce wear and tear on housing by children. Increased police protection might reduce both vandalism and property damage -- as well as personal injury -- from domestic disputes. Further, social security payments such

as the child tax credit could be made on a monthly basis and mailed to arrive toward the end of the month, just before rent payments are generally due. This would help to ensure that rent payments were made on time, making the household more creditworthy.

Another policy that would make certain households less costly to serve would be the establishment of an emergency rent fund, administered not by a social assistance agency but by a housing agency. The rationale for the fund would be the lack of access of low-income households to private capital markets. It would make loans solely to enable tenants to meet rent payments. The loans would be short-term, and they would be made only when there was a sound basis for expecting them to be repaid. A housing agency would be in a position to assess applicants because of its experience in dealing with rent delinquency among its own tenants. This would be an efficient policy if the emergency fund could be made self-sustaining. Even if the fund needed subsidy, it would still represent an improvement in efficiency if it lowered the costs to landlords of servicing low-income households.[22]

In addition, the premium rent paid by tenants in a low-rated category could be reduced for some households by reducing the cost of information to landlords. In particular, with more information, landlords would be able to determine when a household was inexpensive to serve. Not all households in a low-rated category are alike.

Combating Restrictions Against High-Cost Households

Some policies intended to deal with discrimination in the housing market may have perverse effects. One such policy would be legislation that made rent premiums for high-cost households illegal. Under such a policy, landlords would earn a lower return if they accepted a high-cost tenant rather than an average tenant. Accordingly, assuming that landlords are profit-maximizing, they would attempt to exclude such tenants, who, as a result, would have difficulty finding any accommodation instead of merely having to pay a premium for it.

A ban on rent premiums might in fact have very little effect of any kind. To a substantial extent, buildings are targeted to a specific group of potential tenants, and in buildings targeted to high-cost tenants all of the units are likely to have a premium, not merely those occupied by such tenants. This premium may not always be readily apparent because it may take the form of a lower standard of building maintenance. Buildings that permit children may offer accommodation that is in poorer repair than the accommodation in adult-only buildings.

One policy that would reduce the premium that high-cost households pay would be a law making their exclusion from any accommodation illegal. The City of Toronto has moved one step in this direction by requiring landlords to permit children if any lived in the building when the by-law was passed. The Toronto by-law may tend to inhibit landlords in

nearby jursidictions from renting to households with children because of the possibility that they be required to continue to be prepared to do so. In general, laws requiring landlords to accept households with children will be inefficient so long as the rent of a unit in a building does not vary according to the tenant occupying it, because households with children will tend to pay less than their marginal cost to the landlord (assuming that such households are high-cost households)[23] and other households will tend to pay more. Further, the presence of children may impose negative externalities on childless households. At the extreme, the lack of adult-only rental accommodation might force quiet adults into single-family home-ownership.

Although a policy that required landlords to rent to households with children would be inefficient, some intervention in the market in support of such households may be necessary. A situation in which households with children cannot find rental accommodation is contrary to fundamental social values. One way of providing accommodation for them is through social housing. But intervention in the private market is an alternative. The loss of efficiency would be reduced if the intervention took the form of a requirement that landlords of a certain size permit children in a proportion of their units. Landlords would be free to determine which of their units would be available for this purpose. They might provide the units in the lower two or three floors of a high-rise building, or they might provide them in a separate building.

The affordability effects of such a policy would be mixed. If providing housing service for families were profitable, landlords would do it voluntarily. When landlords are forced to serve unprofitable groups and cannot vary rent according to type of tenant, they will tend to increase rents for all tenants, including low-cost groups such as the elderly, in order to maintain their overall rate of return. Thus the likely effect of the policy would be a reduction in the price of housing service for families (because of the increased supply of such housing), but a rise in the price of housing service for the elderly.

Intervention to increase housing availability for families is being made attractive in some large cities by the disappearance of much of the kind of housing that poor families tend to occupy. Old, low-rise housing close to the centre is being gentrified.[24] In such housing, the noise of children is a relatively minor problem because tenants have few neighbours separated only by a wall or floor, and the cost of children's wear and tear is relatively low because the structure is old and frequently not well-maintained.[25] Families are apt to be less costly to serve in such housing than in new, large, multiple-unit buildings.

Building Codes, Housing Standards, and Public Policy

The discussion in this section of affordability problems and policies to deal with them has so far dealt only with problems and policies associated with the price of housing service. But another factor in affordability problems is

the quantity of housing service consumed. Rent can be too high if the quantity of housing service is too great -- that is, if accommodation is excessively spacious or of excessively high quality. What constitutes an excessive quantity of housing depends, of course, on the agent making the judgement. We shall focus on the situation in which the quantity of housing is excessive in the view of the household concerned, in the sense that the household, given its income and the price of housing service, would not willingly choose the accommodation it is living in, if inferior accommodation were available.

One cause of this situation is the constraints imposed by building codes, electrical codes, and housing standards. Since December 31, 1975, all municipalities in Ontario have been required to follow the Ontario Building Code. Many municipalities already had building codes of their own. A building code sets minimum standards that construction and renovation must satisfy for the safety of the inhabitants of a building and its neighbours. To the extent that the building code is enforced, a household cannot choose to live in and pay for new or renovated accommodation that has a lower structural quality per square foot than the code allows.[26] The force of this constraint is somewhat reduced by the existence of buildings constructed in earlier decades, since only renovated portions of such buildings need conform to the current code.[27] But clearly this relaxation diminishes with time and is less important the

more stringent earlier standards were. Further, the rent differential between old and new buildings will not fully reflect the lower standards of older codes if a sufficient number of tenants do not value the current building code requirements. Instead, the rent of older units will tend to be pulled up by the higher cost of new units.

How important is this constraint in its effect on affordability? The answer depends, first, on the difference between the level of housing quality that a low-income household would freely choose and the building code minimum. A household might prefer a half-hour fire separation to an hour separation between its house and the adjacent row house if it could spend more on food, clothing, and smoke detectors. It might not greatly mind the odors and other problems associated with an unvented toilet, the inconvenience and hazard of having only two electrical outlets in its bedrooms rather than three,[28] or the hazard of having no handrail on its stairs. No data are available on which of the housing characteristics required by the code householders value more than others, but some guidance to relative preferences for structural qualities in general is given by data from rural areas, where building codes are apt to be non-existent, very recent, or unenforced. In Ontario in 1976, an estimated 13 per cent of poor and near-poor rural households had no running water; for large urban areas, where a lack of running water is illegal, the figure was less than 1 per cent. The proportion of poor households without central heating was 28 per cent in rural areas and

under 2 per cent in large urban areas.[29] Evidently, when the poor are relatively unconstrained, they frequently accept a very low level of structural quality in order to spend more of their limited income on food, clothing, and other goods. If over 13 per cent of poor households choose housing with no running water when they have the opportunity to do so, then it is plausible that far more than 13 per cent would accept an unvented toilet rather than a costlier vented toilet, if they had the choice. In the same vein, if 28 per cent accept no central heating, it is plausible that far more than 28 per cent would choose two electrical outlets per bedroom rather than three.[30]

The effect of building codes and other regulations on affordability also depends on the extent to which landlords are able to pass on the extra costs of providing housing service satisfying these regulations. If no households placed any value on certain structural characteristics required by law, if regulations were everywhere the same and were fully enforced, and if the amount of land zoned residential were fixed, then the cost of satisfying regulations would be akin to a tax on building and would in the long run both lower land values and increase the price of housing service somewhat. It is plausible, however, that middle- and upper-income households do value the characteristics required by law. The law was, after all, passed by legislators responsible to the electorate. In this case, the cost of satisfying regulations would result in a greater

increase in the price of housing service than in the previous case, an increase borne by all renters, poor and non-poor. This can be seen by noting that if non-poor households value the characteristics required by law -- in other words, if the regulations on characteristics are not a binding constraint on their choice -- then the cost of providing these characteristics will not lower the return to builders building housing for them. And since developers of rental housing for the poor have to compete in the land market with other developers, the price of land for housing for the poor will tend to be greater than in the previous case. Thus the poor tend to have to pay the costs of providing the characteristics required by regulations if they wish landlords to provide them -- rather than just middle- and upper-income households -- with housing.

The Rationale for Building Regulations

The discussion of building regulations has so far not mentioned their rationales. A major one is the prevention of negative externalities. The requirement that there be walls, doors, and piping to a standard that ensures one hour of fire separation between dwelling units clearly exists to prevent a household from suffering injury and damage because of the carelessness or bad luck of its neighbours. The requirement that there be ground cover[31] helps prevent eyesores in the neighbourhood.

A second rationale for regulations is the view that structural characteristics required for the safety and

health of occupants are merit goods that should be legally required whether the occupants wish to pay for them or not. This is probably the major justification for requiring an owner-occupier who adds new stairs to include a handrail whether he wants one or not.

A third rationale may be taken broadly as the cost of information to consumers. Consumers are not building experts and so do not know when a building is unsafe and unhealthy. In effect, the building codes tell them what is required for health and safety, and the building, electricity, and plumbing inspectors armed with the code act as quality control officers, helping to prevent unsafe and unhealthy buildings from being sold or rented to ill-informed households.

Policy Options with Respect to Building Regulations

There are a number of alternative policies for dealing with affordability problems arising from the constraint on household choice imposed by building regulations. The first is a reduction in building code and housing standards. This measure would require an expert cost-benefit analysis of existing regulations. It may be that certain standards are unnecessarily high because alternative ways of achieving the same end have not been sufficiently considered. One may ask, for instance, whether permanently wired smoke detectors designed to sound in more than one dwelling unit might not be a cheaper and more effective way of preventing the spread of fire than a one-hour fire separation between units.

In addition, a more fundamental change might be considered. The single current building code might be replaced by two or more versions of varying stringency. City planners or a like body would then determine which version to apply in a given district.

The analogy to zoning is obvious. In areas where most of the housing was built decades ago under much less stringent standards than those currently in use, there would be a good case for making the least stringent version of the code apply to new construction, alteration, and renovation so as to not unduly discourage such activity. For instance, property owners would probably be reluctant to pay for renovations completed to a high standard of fire resistance if the remainder of the house, and neighbouring houses, were much less fire resistant. Households very concerned about fire resistance would tend instead to undertake new construction in other neighbourhoods. This discussion suggests what the different sets of regulations should be like. In particular, the loosest set might be old regulations -- revised where they were merely obsolescent rather than less demanding -- and the tightest set might be current regulations. Thus one district in a city might be governed essentially by forty-year-old standards, another by twenty-year-old standards, and another by current standards.

The efficiency and equity of this policy would clearly depend on the way in which various districts were treated. For an indicator of efficiency the planners could use the estimated property value in a district, choosing the set of

regulations that maximized this value. (This decision rule has been suggested for use in zoning decisions.) In an area where most of the existing dwelling units were old and built under old, relatively low standards, the existing negative externalities such as fire hazard would plausibly mean that property values would be highest if relatively undemanding regulations were specified. Alterations and renovations could be carried out without increasing standards in a building to a level far above that of its neighbours. In an area where the old housing largely houses low-income households, it is particularly unlikely that there would be demand for renovated housing built to a high standard, surrounded as it would be by houses built to a lower standard.

It is possible that in some respects a formal system of different regulations for different districts would merely regularize existing practices. Building inspectors may be less demanding when a building being altered is surrounded by old buildings below modern standards than they are in other situations.[32] Or more illegal renovation may occur in old neighbourhoods than elsewhere -- an especially likely event if building inspectors depend on complaints to catch illegal work[33] and if many neighbours have done or intend to do illegal work themselves. But it would surely be more efficient and fair to enforce a set of relatively loose regulations than to allow illegal work.

The use of different sets of standards -- perhaps called "very old", "old" and "modern" -- would still allow

building codes and inspections to perform an information function for consumers. An owner could choose to build to a higher standard than the one required in his district and have the certificate reflect this.

Most of the reasons that underlie the proposal for different versions of building codes could also be to justify the introduction of different versions -- or formalized differential enforcement -- of housing standards. There is already the precedent that only the health and safety provisions of the Ontario Building Code are enforced for buildings scheduled for demolition. From the United States come indications of more general differential enforcement. The following passage occurs in what Elliott and Quinn (1983) call "one of the most influential pronouncements on housing code enforcement":

> The door is open for enforcement agencies to relate their programs to the general character and specific problems of given areas. Inspection energies can thus be concentrated where they are most effective rather than widely scattered on the usual basis of servicing complaints. In areas scheduled for early demolition ("slums") enforcement efforts may well be limited to interim control of the most flagrant health and safety hazards. Primary inspection energies can be devoted to areas of substandard grade, but not warranting demolition ("intermediate areas"), where wide enforcement of a fair total standard would be the goal. (American Public Health Association Committee on the Hygiene of Housing, 1945, 44-45; emphasis added)

This quotation refers to a wider variation in enforcement standards than we have proposed here and leads to

another point. Suppose that, contrary to the policy option considered above, the high standards embodied in the current regulations in large cities are applied to all districts, rich and poor. If the imposition of these standards is not to contribute importantly to the affordability problems of the poor, there must be some public subsidy. It seems fair that the majority who impose the standards on the poor -- who evidently do not greatly value them -- should in large part pay for them. Further, given high standards, a subsidy may be justified on efficiency grounds, since it will offset the dampening in the demand for space by low-income households caused by the fact that low-quality, low-cost space is illegal and thus difficult to find.

RENT REGULATION I: RENT REVIEW IN ONTARIO AND AFFORDABILITY PROBLEMS

So far we have discussed certain regulations -- those for zoning, building, and housing standards -- that cause or exacerbate affordability problems. In this section we discuss regulations that appear to be directed to the reduction of affordability problems: rent review. The rent review provisions of the Residential Tenancies Act essentially allow landlords to increase the rent of a unit once a year by 6 per cent as a right and to increase rent by more than this if the Residential Tenancies Commission approves. In general, increases will be approved if they are no greater than cost increases or if they are required to

enable the landlord to earn revenue equal to 2 per cent more than his costs. Among the costs that may be passed through are financing costs, although in late 1982 the extent to which financing cost increases resulting from the purchase of a building could be passed through was greatly curtailed. Two important exemptions from rent review are premises renting for over $750 per month and those in buildings where no unit was rented before 1976.[34]

The Overall Impact on Rents

The intent of the rent review legislation is that its guideline increase should apply to accommodation that yields an unchanging bundle of housing services. It is aimed at restraining the price of housing service (except to the extent that price increases are associated with cost increases or to the extent that the landlord's return is too low). To what extent has it done so? There is no question that rent review has had an impact in some instances. Whether it has had a more general impact is less clear. The raw data shown in Table 4 indicate it has apparently had a substantial -- but not <u>very</u> substantial -- effect. The median difference between covered and exempt two-bedroom units in April 1982 was 21 per cent. The differential was far greater in Toronto and places close by than it was elsewhere.

However, these data cannot be taken at face value. The exempt units may be of higher quality than the covered units. Jazairi (1983) finds this to be the case for a

TABLE 4

Rents for Covered and Exempt Apartments, Ontario, April 1982

City	Average Monthly Rent, Two-Bedroom Apartments in Buildings with Six or More Units: Review-Covered	Review-Exempt	Percentage Difference
Toronto	$444	$641	44.4
Mississauga	375	500	33.3
Hamilton	301	392	30.2
Thunder Bay	330	400	21.2
Sarnia	322	386	19.9
Brantford	280	329	17.5
Kingston	295	328	11.2

SOURCE: The first two columns are taken from a CMHC Rent Survey as reported in Miron and Cullingworth (1983, 24).

sample of Toronto apartments of various sizes. While the estimated raw differential between covered and controlled apartments is 27 per cent, differences in quality and size account for all but 9 to 14 percentage points of this amount, and Jazairi suggests that 9 points is a better estimate than 14 (ibid., 26). Indeed, there is good reason to doubt that the differential is even as high as 9 points; it is possible that much of the estimated differential is attributable to newness rather than to exemption from rent review.[35] Further, Jazairi does not include the length of

tenure of tenants as one of his explanatory variables, despite the well-established finding that long-term tenants on average enjoy a rent discount.[36] But covered units are substantially older than exempt units, and therefore more covered units than exempt units are occupied by long-term tenants receiving discounts. In view of this circumstance, the discount attributable to rent review could easily be well under 9 per cent in Toronto and -- in view of the differences in Table 4 -- close to zero in places outside the Toronto orbit. Assuming that in the absence of rent control the price of housing service would be between the price of covered units and the price of exempt units,[37] the discount attributable to rent review is even less than this rather small differential. We conclude that the assumed 7.5 per cent discount for the province as a whole used in earlier official calculations of benefits (Ontario Ministry of Municipal Affairs and Housing 1982) is probably much too great.

It is important to note that even if the average effect of rent review on rent increases were zero, it would probably still be of benefit to households. Consider two scenarios. In the rent review scenario, 30 per cent of rents increase by 20 per cent; in the unregulated market scenario, 10 per cent of rents increase by 60 per cent. The average effect is the same in each case, but a risk-averse renter would prefer the first scenario: such a renter would feel better off with a 30 per cent risk of a merely

undesirable event than with a 10 per cent risk of a calamity.[38] Under the standard assumption that households are risk-averse, rent review is thus a benefit.

Impacts on Rent Paid by Low-Income Households

Of course, the impact of rent review on the price of housing service paid by poor and near-poor renters might be quite different from its impact for renters on average. Consider, first, the impact of illegal rent increases. There is little official investigation of such increases (Arnott with Johnston 1981), and when there are prosecutions they are likely to come about through pressure from articulate high-income renters in luxury buildings.[39] This suggests that the prices paid by the poor are even less likely to be directly restrained by rent review than the price of housing service on average.

The guideline system can work against the elderly poor. Because a maximum increase of 6 per cent is permitted in any year as a right, landlords who skip a year will forever receive a lower rent unless they successfully apply for rent review. The consequence of rewarding a poor, elderly widow who is a good tenant -- or of simply taking pity on her -- by not raising her rent is a lower legal rent in future years. More generally, the disincentive for length-of-tenure discounts implicit in the guideline system tends to work against all long-term tenants, and the poor elderly are especially likely to be in this group. It is important to add that the high observed incidence of zero rent increases

even in cities where the market is strong suggests that tenure discounts are important in general and that even under rent review they are important. In October 1981, 16 per cent of non-movers in Metro Toronto reported no rent increase over the preceding year, and in other cities the percentage was much higher. Further, in buildings with fewer than six units -- plausibly the buildings whose landlords are most likely to reward individual tenants -- the percentage was far higher, ranging from 33 per cent in Toronto to 63 per cent in Windsor (Ontario Ministry of Municipal Affairs and Housing 1982, Table 1.7). Perhaps many small landlords simply ignore rent review, rewarding good long-term tenants with low rent increases while imposing illegally high increases on new tenants.

The cost pass-through rules too can work to the detriment of low-income renters in particular situations. If there is a large cost increase in a single year, the landlord obtains maximum rents by applying for cost past-through immediately and following the guideline in future years. Without rent review, the same ultimate rent level may be reached more slowly and evenly, thus cushioning tenants. Very large increases are especially likely to arise when interest rates rise. A sudden, large increase rather than an increase spread over time is likely to be a special hardship for the immobile old, but it will also be a substantial hardship for other poor households. They are unlikely to have financial reserves with which to soften the

blow, especially if they are already paying half their income for rent.

Maintenance and Low-Income Households

One theoretically likely effect of rent review is a decrease in maintenance (Arnott with Johnston 1981; Frankena 1975). Landlords have more freedom under rent review to determine the implicit price of housing service than to determine the rent they charge: rent review explicitly refers to rents, not to the price of housing service. Landlords who are restricted to a guideline increase of 6 per cent may keep the implicit price of their housing service equal to what it would be in a free market by reducing the amount of housing service they deliver.

However, a lower level of maintenance accompanied by lower rent might be positively attractive to low-income households. It would clearly improve affordability. Further, as we argued earlier, low-income households in large urban areas would probably prefer, given their income, to live in lower-quality accommodation than they currently occupy. A high level of maintenance, like high building standards, may be consistent with the preferences of middle- and upper-income renters, but not with those of the poor -- again, given their income. In a free market, landlords might reduce their risk of vacancy by targeting their units at the more plentiful middle-income renters, leaving the low-income market badly served. The availability of units with reduced maintenance and reduced rent would probably be

particularly helpful for poor families with children, because it would reduce the extent to which they are relatively costly to serve: crayon marks are less costly on a five-year-old paint job than they are on a fresh one.

Despite the theoretical presumption that rent review is likely to reduce maintenance, there is no evidence that Ontario's rent review program has had this effect. Year after year, renters surveyed in Ontario have been asked about changes in maintenance in their buildings, and year after year more than two-thirds have replied that there has been no change, while considerably more than two-thirds of the remainder have reported improvement rather than deterioration.[40]

Conversions, Renovations, and Demolitions

A renter may experience a rise in the price of housing service not because of a rise where he currently lives, but because he is forced to move to more expensive accommodation. Evictions may occur as a direct consequence of a landlord's attempt to escape the constraints of rent review. A landlord may sell a converted house with two or three apartments to a purchaser who changes it back into a single-family house. Rental apartments may be converted into condominiums. A building may be demolished and replaced by a condominium building, a rental apartment building -- exempt from controls because of the new construction provision -- or some other type of building. The landlord

may undertake renovations so extensive as to require his tenants to move.

There are grounds for believing that the tenants dispossessed by condominium conversions, demolitions, and luxury renovations will disproportionately be the poor and near-poor. Well-located but old, low-density buildings with below-market rents are prime candidates for redevelopment. Old buildings with obsolescent kitchens and bathrooms and no recreational facilities tend to be occupied by the poor and near-poor. To the extent that the rents in such buildings are below market, their occupants tend to be the elderly poor and near-poor, since they are generally perceived to be low-cost tenants. The causation also works the other way: elderly tenants have very low mobility rates and therefore tend to receive substantial long-tenure rent discounts; in consequence, any building largely tenanted by the elderly tends to have below-market rents. Moving costs for the elderly are probably high and so eviction will be a great hardship -- a fact reflected in the great outcry that frequently occurs when they "lose their homes".

Any accommodation that exists after conversion or renovation is very likely to be beyond the means of the poor, either because it requires owner occupancy or because its rent is too high. Thus the poor suffer a double blow: eviction confronts them with substantial moving costs, and they are apt to be unable to find another housing bargain as good as their previous one. Upper-income households that suffer eviction because of conversion or renovation at least

have the consolation that their choice of luxury housing is widened, but such housing is of course irrelevant to the poor.

How important are these phenomena? Condominium conversions have occurred in significant numbers and have led some municipalities, notably the City of Toronto, to refuse to permit them as a general rule. Demolitions in 1981 in the City of Toronto were planned or underway for at least twenty apartment buildings with over 750 units. Luxury renovations involving evictions also affected a substantial number of units in 1981 (City of Toronto Planning and Development Department 1982). It is not clear, however, that this activity is a consequence of rent review. Demolitions of old buildings are to be expected in any city where land values close to the centre have increased greatly over time. The bare land alone at a site in north Toronto may be worth far more than the present value of the expected rents of an old four-storey building on the site, with or without rent control. The ratio of the value of the land to the value of the building is just too high to be economic under current conditions. This is underscored if the building is obsolete. Condominium conversion and luxury renovations close to the city centre should also be expected to occur whether or not there is rent review, given the increase in two-earner families with a desire to minimize commuting time and given the secular rise in real incomes and the associated rise in demand for luxury accommodation and home-

ownership. Further, inflation has accentuated the tax advantages of home-ownership. The large-scale gentrification occurring in the home-ownership market (that is, outside the rental housing market) in some parts of central Toronto is a clear sign that factors other than rent review also contribute importantly to the demolition and luxury renovation of rental buildings.

The Rationing Mechanism

Rent review can increase the affordability problem for some households if it creates a shortage in the covered sector and if the rationing mechanism tends to go against them. Landlords whose rents are kept below their free market level by rent review are in a position to pick and choose among applicant tenants. The losers have to pay the higher rents in the exempt sector -- rents higher, in all likelihood, than they would be in the absence of rent review (Smith and Fallis 1984).

The poor are likely to be disproportionately the losers in this situation, if only because their poverty makes them less creditworthy than high-income tenants. The elderly poor, however, are quite clearly exceptions to this rule. A sharp distinction must be made between them and the other poor, especially families. The elderly have government pensions, which remove them from the category of the desperately poor and ensure that their income will not fluctuate. Poor families are apt to swing between low-wage income and social assistance. Moreover, their children,

like most children, are apt to be noisy and to cause damage.[41] For these reasons alone, the elderly poor are apt to be winners and poor families are apt to be losers in the search for affordable housing. But the elderly poor have a further advantage. They are very immobile -- far less mobile than poor families -- and the immobile are major winners in the rationing of scarce housing simply because they got there first, and once in possession, they can stay in possession -- unless there is demolition, conversion, or luxury renovation.

There is one possible scenario that could make the elderly losers in some rationing situations. Suppose that in a high proportion of the Ontario rental stock -- especially in buildings with few dwelling units -- rent review applies de facto only to continuing tenants. This scenario has some plausibility. A continuing tenant can simply refuse to pay an illegal rent increase and he cannot be evicted except for a limited number of reasons. New tenants, however, often have no way of knowing previous rents -- there is no rent registry -- and even if they do eventually discover them, they may find it repugnant to natural justice to refuse to pay the rent they agreed to pay before they moved in. In this situation, a landlord seeking a maximum return will choose tenants who are more mobile than the tenants it would be optimal for him to choose in a free market. The optimal mobility rate for a landlord depends on a comparison of vacancy, decorating, advertising,

and administration costs on turnover -- all of which will be low in a tight market -- with the differential between legal rent increases and optimal rent increases. Consequently, landlords of rundown properties may positively prefer poor families to the poor elderly, since families are much more mobile than the elderly.

Indirect Impacts

Numerous government programs have subsidized the private rental market in the years since the initial imposition of rent review. These subsidy programs were put in place partly to generate employment and partly to increase the supply of rental units. The market was becoming too tight and few units were forthcoming. This tightening of the market may have been caused by the prevailing high rates of inflation, which greatly increased mortgage payments if the traditional level payment mortgage was used. The higher mortgage payments were to a large extent offset by the prospects of future capital gains -- especially if condominium conversion was anticipated in five or ten years -- but the negative cash flow in the early years of a project was beyond the capacity of many developers to sustain[42] and uncongenial to mortgage lenders.[43] As Ozanne has said, in a paper dealing with the U.S. rental housing "crisis":

> There is one problem accepted universally. That problem is inflation, the primary unsettling factor in the rental market during the 1970's. (1981, 48)

However, the tightening of the market that provoked the subsidy programs may have been caused not entirely by inflation, but by rent review as well.[44] Although new rental units were exempt from controls, many developers may have feared that this status would not last and so ceased building rental units.

The major subsidy program of the 1970s, the Assisted Rental Program, if taken in combination with the tax subsidy available to MURBs (Multiple Unit Residential Buildings), has an estimated present value per dwelling unit assisted of almost $20,000 (CMHC 1983, Table 8.5). Clearly, a flood of ARP units[45] subsidized to this massive extent would hold down the rents of existing non-ARP units.[46] To the extent that these programs were the result of a market problem brought about by rent review, they were perhaps the major contribution of rent review to improving the affordability of housing, especially outside Toronto. To see this, assume that the real interest rate is 4 per cent so that the annual value of the ARP and MURB subsidies is very conservatively taken at $800 per unit. This is equivalent to $67 per month. Suppose that half of this subsidy is passed on to renters, so that rents are $33.50 less than they would otherwise be. If ARP units are close substitutes for existing units, then the discounting of ARP rents (relative to what they would be in the absence of the ARP and MURB subsidies) by $33.50 reduces the rent that tenants are willing to pay for non-ARP units; for those non-ARP units that are very similar to ARP units, the reduction in rents

(relative to what they would be without ARP) is close to $33.50 per month; for other units the reduction is less. Thus it is entirely plausible that the ARP and MURB subsidies have dampened the average rent of existing units by something like $25 per month. This is more than 10 per cent of the average rent in the province in 1980 and thus more than almost anyone would suppose that the direct impact of rent review on rents has been.

<u>Behavioural Response and Affordability</u>

In general, households respond to a decrease in the price of a good by consuming more of it. Thus, if rent review lowers the price of housing service (relative to the price of other goods), the consumption of housing service is predicted to increase. Since rent, by definition, is the price times the quantity of housing service, this prediction implies that under rent review the drop in rents -- and accordingly the reduction in observed affordability problems -- will in general be less than the drop in the price of housing service. A household that would have squeezed itself into a one-bedroom apartment if there were no rent review might instead live in a two-bedroom one. Indeed, if the price elasticity of demand for housing were unity, rent review would bring no observed improvement in affordability whatsoever. It appears, however, that the price elasticity of demand for housing among low-income households is far below unity -- and indeed far below 0.5.[47] Therefore a reduction

in the price of housing service will reduce affordability problems.

Evidence on Affordability Effects

We have argued that rent review in Ontario has had little effect on market rents in general, but we have also suggested various reasons why, nonetheless, it may have affected the affordability of the housing of the poor and near-poor. We now return to the affordability data discussed earlier in this paper to assess whether rent review has had a discernable overall effect on affordability.

It will be recalled that the data show a drop in affordability problems over the 1976-82 period. As we noted earlier, there are a number of possible explanations for this drop other than housing policy. Further, housing subsidy programs such as ARP, which depressed rents in the exempt sector, clearly played a role in the improvement in affordability over this period. It is, therefore, impossible to say whether or not any of the improvement was an effect of rent review. However, there is one piece of evidence to suggest that at least some of it was. The number of elderly households with affordability problems fell somewhat more than did the number of families with such problems. And the elderly, as we have pointed out, are low-cost, immobile households, and therefore especially likely to benefit from rent review. Thus it is consistent with the data that rent review did have some effect on affordability, although other factors such as higher incomes and

increased social housing for the elderly might also explain this effect.

Inefficiencies

One of the grounds for opposing rent review is the inefficiencies it introduces. There is, first of all, the cost of the resources used in administering and complying with the policy. However, the costs to the government have been quite low -- $4.7 million in the 1980-81 fiscal year (Ontario Ministry of Housing 1982b, Table 5.6). The costs to landlords and tenants have probably been low as well, except when rapid increases in interest rates have resulted in a large number of applications for increases higher than the guideline. A second inefficiency that is generally predicted is a diversion of resources from housing maintenance, owing to the disincentive to maintenance implicit in the guideline system (Arnott with Johnston 1981). The evidence reported earlier in this paper, while not conclusive, does not support this prediction. More generally, the evidence suggests that rent review has had little overall market impact, and little overall effect on maintenance is theoretically, as well as empirically, consistent with this.

A third predicted inefficiency of rent review is the diversion of resources from investment in new rental housing. There has indeed been a substantial decline in rental housing starts since the implementation of rent

review, but it is plausible that this decline has occurred largely because of the multifarious effects of inflation and demographic changes -- the factors largely responsible for the decline in rental starts in the U.S., where rent control is not widespread (see Ozanne 1981; Hendershott 1981) -- and, in the last few years, because of the ending of ARP and the elimination of the MURB tax subsidy. Again, a minimal effect on rental housing investment is consistent with the evidence of little effect on rents and maintenance.

A more general observation on efficiency effects is in order. While it is true that rent control generally has more effect on the housing stock the longer it is in effect, Ontario's form of rent control has self-destruct characteristics that tend to reduce the force of this generalization. Dwellings are exempt from rent control not just if they are newly built or, say, less than five years old, but if they were completed after the beginning of 1976. Units exempt on the basis of age are thus a growing proportion of the stock. Further, there has been no change in this rule for years, so expectations of a tightening of the exemption rules should tend to decline. The exemption rules were actually loosened in 1979, when dwellings renting for $750 per month or more were exempted. With inflation, this exemption increases in quantitative importance over time, and by 1984 a substantial proportion of new units in Toronto were exempt on this basis alone. This erosion in coverage presumably has an impact on expectations, which are critical in determining investment in rental housing: only if the expected stream of future

rents over a long period is high enough will the investment be profitable. Thus the evident erosion of the coverage of rent review has probably reduced the negative impact of rent review on the expectations of the future stream of rents, and for that reason reduced its negative impact on investment in rental housing.

This discussion would not be complete without a warning note. At present, vacancy rates in most Ontario cities are very low. This situation is likely to result in substantial rent increases in the near future, especially if there is a substantial decline in the unemployment rate and if real interest rates do not fall from their very high current levels. If these increased rents bring about irresistible political pressure for a tightening of rent review, or if investors expect that they may do so, investment in rental housing will be severely discouraged just when it is badly needed. A major reason for ending or softening rent review is to forestall this effect. Ending rent review would help to ensure that investors will respond to the signals that there is high demand without the aid of programs such as ARP and thus would help to ensure that there is no housing crunch.

The Distribution of Benefits and Costs

Earlier, we considered the effects of rent review on the affordability of housing for poor and near-poor renters. But, for an assessment of rent review as an affordability

policy, we also need to examine the benefits and costs for other income groups. In assessing the overall costs and benefits, we assume that ideally the benefits of any economic policy go to the neediest, the costs are borne by the least needy, and people in similar circumstances do not get different benefits or bear different costs. In addition, we assume that people should not benefit from the exploitation of monopoly power, whether or not they are needy.

The first aspect of distribution we shall examine is the distribution of the benefit of protection against unconscionable increases. This benefit is likely greater than the cost of the extra lumpiness of increases arising from the cost pass-through aspect of rent review. Further, on the assumption that households are risk-averse, the removal of the risk of unconscionable increases is worth more than the amount of such increases in the absence of rent review. This benefit tends to increase with a household's moving costs. For this reason, the elderly -- whether poor or of middle income -- have probably been the group receiving the largest average benefit; poor families may also have been important beneficiaries. Few of the rich have received this benefit because few of them are renters (see Miron and Cullingworth 1983, Table 8.1). The majority of beneficiaries have been middle-income renters simply because most unsubsidized renters are in this class. The costs of this benefit have been borne largely by those landlords who would otherwise have exploited the limited

monopoly power they have because of the existence of moving costs or because zoning and other factors limit the supply of units with particular characteristics; and by those landlords who would have used such increases as a means to evict, in situations where explicit evictions are illegal.

We earlier adduced evidence that, overall, rents have been little affected by rent review. But some rents have been affected. Who are the likely beneficiaries? First, they probably live in areas, such as downtown Toronto, in which the market rent has risen relative to rents elsewhere. Second, they are probably long-term tenants, or if not long-term tenants they are low-cost households in large, pre-1976, multiple-unit buildings. It seems a reasonable presumption that the landlords of such buildings, because of their high visibility, find it relatively difficult to illegally increase rents between tenancies. Moreover, they are also relatively likely to be large corporations concerned with behaving respectably. Many of the tenants who benefit are among the elderly poor and near-poor, who are very immobile and relatively low-cost. But many middle-income and some upper-income tenants also benefit, as do the owners of post-1975 rental buildings and the owners of condominiums and other non-rental residential buildings in these areas. Most of the cost of the lower rents in high-demand areas are borne by landlords; if our presumption about illegal increases is correct, most of these are corporations (and so ultimately their shareholders bear the cost) or individuals rich enough to own a large

multiple-unit building. But to some extent the cost of these lower rents is also borne indirectly by high-cost tenants such as poor families, who will find themselves unacceptable to landlords faced by excess demand.[48]

RENT REGULATION II: REGULATION AGAINST UNCONSCIONABLE INCREASES

The arguments advanced against the rent review program in Ontario apply in large part to any form of rent control in which rents may be held below their market level. But these arguments would not hold for an alternative regime in which rent regulation was designed to merely prevent unconscionable increases.[49] Such a regime is discussed in this section.

One form of this regime would allow tenants to appeal rent increases; the appeal would be allowed if the new rent was above the market rent of similar units. But this arrangement puts too much of a burden on tenants, especially the less articulate ones. An alternative would be to shift the onus to the landlord by setting an arbitrary threshold increase of 1.5 (or some other ratio greater than one) of the average rent increase in the city in the previous year. Landlords could appeal for a higher increase, which would be allowed if the resultant rent level was not above the estimated market rent for the unit. There would be no regulation of rent increases between tenancies -- a provision consistent with the rationale for the regulation,

which is to prevent a landlord from exploiting his limited monopoly power and from using unconscionable rent increases to bring about economic eviction when explicit eviction is illegal.

This policy would help affordability problems only marginally, although the margin might be important. It would do very little to change the incidence of households with affordability problems, but it would prevent the victimization of households that either had an affordability problem or were close to having one, and that did not have the financial resources to cushion an unexpected increase in expenses.

An alternative policy that goes slightly further is one that would in effect constrain landlords, in some circumstances, to take some time to reach market rent levels. Under this policy, the basis for appealing the threshold rate of increase would be not the market rent of comparable units, but rather landlord's cost increases. Further, the landlord would be allowed a higher-than-threshold rate of rent increase only if he needed it in order to pass his costs through within two, or perhaps three, years. (Cost increases for this purpose would not ordinarily include increases arising from an increase in mortgage principal.) The chosen threshold rate would be high enough to ensure that while the rent of a unit might be held below its market value for a few years, it need not be below market for more than a few years. Thus the landlord would, under this regime, share with the tenant the burden of adjustment to

large cost increases. For instance, if interest rates increased from 13 per cent to 23 per cent, the landlord might not be permitted to pass through all the increase within a year. This restriction can be justified on two grounds. First, immediate cost pass-through might push the rent above the market rent of comparable units,[50] in which case a sitting tenant who wished to avoid moving costs would be victimized. Second, while many landlords have low incomes (Miron and Cullingworth 1983), it is unlikely that many of them have similarly low assets -- at the least, they own an income property -- and thus they are more likely to have the financial strength to adjust to an unexpected expense than are many tenants.

An implication of this proposal that might be unpalatable to some is that a landlord who allowed his rents to drift to levels far below market level could not ratchet them up to market level in a single year. If a landlord had a building filled with 85-year-old widows paying very low rents, he (or the purchaser, if he sold) would have only limited freedom -- that is, only the freedom allowed by the threshold rate of increase -- to increase the rents to market level. Again, the justification for this restriction is moving costs, and also the implicit contract that a landlord arguably has with long-term tenants. However, this proposal, like the previous one, imposes no constraint on rent increases between tenancies; consequently the average rent in the building would approach the market level faster than would the rent paid by a continuing tenant.[51]

This proposal would go somewhat further than the previous one in assisting those with affordability problems at the margin. Both proposals would leave little room for a landlord to exercise even limited monopoly power. To the extent that long leases with provisions like those incorporated in these proposals have not been available at any price, these proposals would rectify a market failure. On the other hand, they would introduce only minimal inefficiencies, since in virtually all cases a landlord would be assured of receiving market rent within a short period of time.

However, there are two cases in which inefficiencies might be large enough to be of consequence. First, they might be large if landlords viewed the regulations as suggestive of tighter regulations later. It seems unlikely that they would take this view, since the rate of threshold increase suggested here implies an increase allowable without appeal that is substantially higher than the current 6 per cent guideline. Substantial inefficiencies could also arise if there were very large shifts in market rents within a city. For instance, if market rents rose by 6 per cent on average in Metropolitan Toronto (so that the suggested threshold rate would be 9 per cent), but rents in the absence of rent regulation would rise by 12 per cent in the Toronto core, permitted rents in the core would be below market. However, the gap would be reduced by the landlords' freedom to set rents at market levels on change in tenancy;[52] and even the inefficiency associated with

continuing tenants would be less than it is under the current guideline.

Compared with a system of no rent regulation, these proposals would confer a benefit on continuing tenants, whatever their income class. This benefit would not be large, however, except for the very risk-averse and, more particularly, for those who place a high value on security of tenure. The costs too would not be large. A small cost would be borne by landlords in high-demand areas, who would be prevented from raising rents quite as quickly and as much as market demand would sustain. Costs would also be imposed on exploitative landlords.

PRODUCTION-BASED HOUSING SUBSIDIES TO REDUCE AFFORDABILITY PROBLEMS

One way to directly reduce affordability problems is to build subsidized housing for low-income households. Social housing -- public housing, private rent supplement, and the rent-geared-to-income (RGI) portion of non-profits and co-operatives -- provides affordable housing by subsidizing the price of housing service, with the amount of the subsidy increasing as the household's income decreases. Thus these programs may be regarded as housing programs with a negative income tax element. Recipients of this subsidy necessarily have affordable housing because the rent they pay is set as an affordable percentage of income. Indeed, the fact that <u>some</u> poor and near-poor households are assured through this

subsidy of having no affordability problem is a major basis for concern about the non-recipients who do have a problem. It is a matter of fairness.

One approach, then, to reducing affordability problems would be simply to expand the social housing stock until all poor and near-poor households with an affordability problem were moved into social housing. This approach would have two clear advantages over the current rent review program: it would assist only the poor and near-poor, and its costs would be distributed equitably through the tax system, rather than being borne substantially by a restricted group of property owners.

But the public-housing approach also has major disadvantages. It severely limits the choice of recipients, because to receive the housing price subsidy they must live in social housing projects (or in selected private Rent Supplement buildings). The importance of this limitation is illustrated by the existence of a large number of vacancies in public housing for the elderly, even though large numbers of the eligible elderly live in unaffordable housing in the private market. Some poor 85-year-old widows would rather eat toast and drink tea in a familiar apartment in a familiar neighbourhood than eat meat in a tiny apartment in a badly located senior-citizen building in Scarborough. It is very important to notice that an expansion of social housing cannot by itself solve large affordability problems because a large portion of those with such problems do not wish to move to social housing projects.

A second major disadvantage of the social housing solution is that it is very expensive (see Fallis 1980; Steele 1984), partly because social housing is on average much newer than the housing occupied by low-income households in the private market. Social housing developers may build especially high-quality buildings to ensure they do not become obsolete, to achieve city planning objectives, or to attract tenants to the non-RGI portion of their buildings. These may all be laudable objectives, but they have little to do with affordability. Further, social housing provides security of tenure and other advantages that are not obtainable in the private rental market, but these attributes are irrelevant to affordability. Social housing is neither the only solution to affordability problems nor a suitable way to address affordability alone.

CASH, RENT, AND INCOME SUBSIDIES TO REDUCE AFFORDABILITY PROBLEMS

A Negative Income Tax

A direct approach to reducing affordability problems is to increase the incomes of the target groups through transfers. The arithmetic of the rent-to-income ratio means that as long as a household's rent remains constant, an increase in income will reduce that ratio and so help any affordability problem. This approach is attractive on the grounds that a high rent-to-income ratio is a problem because it means that

too little money remains for other goods. Increasing the amount of money the household has is thus an obvious solution.

A program that would do this is a negative income tax (NIT). Such a program would pay to a household with zero income a given amount -- called the support level -- and would pay to other households an amount that decreased as income increased. For example, if the support level were $4,000 and the negative income tax rate were 40 per cent, a household with a zero income would receive $4,000 and a household with a $1,000 income would receive $4,000 minus $400 (or $3,600); a household with a $10,000 income would receive nothing.

A major advantage of an NIT is that, given standard economic assumptions, it is very fair. It pays the same to two households with the same income, and it is most generous to those with the lowest income. A second advantage is that it allows the household to be the judge of the best way to spend its subsidy. In contrast to recipients of public housing subsidies, NIT recipients are free to choose how to allocate the subsidy between housing, food, and other goods.

A disadvantage of the NIT is that the negative income tax rate acts as a disincentive to work and the holding of income-yielding assets. While the NIT does not distort the choice between food and housing, it does distort the choice between leisure and housing. A second disadvantage is the dependence of the NIT on household income alone. It takes no account of the fact that different households face

different prices. It pays the same amount to an 85-year-old widow in Cornwall and to an 85-year-old widow in Toronto if they have the same income, even if the Toronto widow pays twice as much as the Cornwall widow for a similar apartment. Thus, after she receives the NIT payment, the Cornwall widow will have a higher standard of living than the Toronto widow.

Perhaps the most serious objection to an NIT as a policy for tackling housing affordability problems is that it is mistargeted. To see the full force of this point, consider the proposition that taxpayers may prefer to give money to those among the poor who demonstrate that they spend a lot of their income on housing and other necessities. Donors like beneficiaries to be deserving. However, the standard economic model used to assess the efficiency of alternative distribution schemes assumes that taxpayers do not care whether beneficiaries spend their income on necessities or on alcohol and drugs. If this standard assumption is incorrect, then a major disadvantage of an NIT as an affordability policy is that it pays households an amount that does not depend on their housing expenditure. While the NIT payment will help the affordability of all recipients (assuming that their incomes and rents remain the same), many will receive the benefit who do not have a housing affordability problem -- a circumstance that makes the NIT much more expensive than a plan that pays benefits only to those with an affordability problem.

A Housing Allowance Program

A program that is specifically targeted to housing affordability is a housing allowance program. Such programs are already in effect in British Columbia, Manitoba, Quebec, and New Brunswick, and they all use a formula that is both income- and rent-conditioned. Specifically, the allowance (for households whose rent is at or below a set threshold rent) is a set percentage of the affordability gap, where this gap is defined as the amount by which rent exceeds a set percentage of income. For those paying more than threshold rent, the allowance is based on threshold rent rather than actual rent. In British Columbia, the allowance is 75 per cent of the excess of rent over 30 per cent of income.

An income-conditioned, percentage-of-rent housing allowance can be regarded as a special kind of NIT. In the British Columbia version, the support level is 75 per cent of actual rent or 75 per cent of threshold rent, whichever is less, and the negative income tax rate is 22.5 per cent (75 per cent of 30 per cent). The qualification requirement, an expenditure of 30 per cent of income on rent, ensures that only households with a housing affordability problem receive the housing allowance. This is in contrast to the situation with a negative income tax.

To the extent that low-income households paying a relatively high price for housing service do so for reasons beyond their own control, housing allowances will tend to go

to the neediest. The Cornwall-Toronto rent comparison given earlier is relevant here. More tendentiously, to the extent that overhoused tenants are in such a state because moving costs trap them in it, housing allowances again tend to go to the neediest. An advantage of a housing allowance over a production-based housing program is that while both directly help affordability problems, the housing allowance allows the recipient freedom of choice in his housing consumption. It is also far cheaper per household assisted.

But there are also disadvantages to a housing allowance program. First, while it is better targeted to the neediest than an NIT, if moving costs and variability in the price of housing service are important, it will be less well-targeted to the extent that households have affordability problems because they are voluntarily living in relatively spacious, high-quality housing. Concerns about the housing allowance on these grounds are very much reduced by the cap that the threshold rent element in the allowance formula places on the rent subsidy. A second disadvantage of a housing allowance program is the distortion it introduces into the consumption choices of low-income households because it apparently contains a large incentive for households to increase their housing consumption. However, this incentive is much smaller than it seems to be at first sight, and the experience in Manitoba and British Columbia indicates it has very little effect (see Steele 1984). Further, to the extent that a housing allowance is an incentive to housing consumption, it is also less of a work disincentive than an

NIT (see Fallis 1983; Steele 1984). Another objection to a housing allowance is that it may increase the price of housing service by increasing housing demand.

Some fear that housing allowances in effect merely increase the profits of landlords. There is abundant evidence that they do not. An important source of such evidence is the Experimental Housing Allowance Program in the United States. At Supply Experiment sites -- that is, at sites where enrolment was about as large as it would be in a non-experimental program -- rents rose by somewhat less than they did in other cities of the same size (Barnett 1979, Table 5), and non-moving participants experienced at most a very slight increase in the real price of housing service (Barnett 1979). For Canada, there is the evidence of provincial programs. Over the first eighteen months of the Manitoba program, the real mean rent of non-moving participants in Winnipeg is estimated to have actually declined (Steele 1984). The effect of this decline is reflected in the mean rent of all Manitoba participants, which has changed very little over time relative to the rent component of the Consumer Price Index; the pattern over time of the mean rents of allowance recipients in British Columbia and New Brunswick is similar (Steele 1984, Table G1).

CONCLUDING REMARKS

In this paper we have examined the extent of affordability problems in Ontario and found it to be considerable, although it has apparently diminished in recent years. We have also considered the sources of affordability problems. In our view, the major source is low income, but there are other important contributing factors. One is the high demand for accommodation in large urban areas, which has pushed up the price of land and accordingly the rents in these places. Some households are relatively mobile and so do not get the advantage of a long-term discount in their rent. Other households are costly for landlords to serve -- households with children are the prime example -- and so pay a premium rent. Still other tenants -- often the very old -- pay a high rent because they are overhoused, but find themselves trapped by the multifarious costs of moving. The building codes and housing standards in most urban areas push housing quality to a level dictated by middle-income standards, and this process tends to set a floor on rents. Probably less important than these factors is the limited monopoly power that landlords have in relation to sitting tenants because of moving costs (interpreted broadly): a landlord may, in some cases, increase the rent of a continuing tenant to a level above market, although on average a continuing tenant receives a discount.

The policy of choice for dealing with the affordability problem is a program aimed squarely at it. Such a program

is a housing allowance program like those currently in operation in British Columbia and elsewhere. These programs demonstrate that concerns about the possible inefficiencies of an allowance program are in large part misplaced. Nor are landlords reaping extra profits from allowance recipients.

There is also merit in other possible programs, some of which are quite modest. Housing agencies could serve low-income households, especially families, by maintaining lists of available housing, much as universities maintain such lists for students. These lists would help low-income households to find bargain housing. A further help would be an emergency rent fund; such a fund would make low-income tenants more creditworthy and therefore more acceptable to the owners of bargain units. An emergency rent fund might also be used as a source of very short-term loans for the purpose of paying the security requirement of one month's rent that is almost always required if a household is to obtain a bargain unit.

There should be serious reconsideration of current building codes and housing standards. In particular, there is a good case for varying these standards by neighbourhood, just as zoning rules differ by neighbourhood; some variation may already exist because of different levels of enforcement. Different building code standards might be made more palatable to some people by naming them "modern", "old", and "very old". This nomenclature would make the point that in

some areas renovated buildings would generally be of a standard only somewhat higher than that of unrenovated buildings, rather than very much higher.

Some people advocate rent control as an affordability policy. In our view, the evidence reviewed in this paper indicates that the Ontario rent review program has had little overall impact on rents in the province. Even in the Toronto market the effect has generally been small, although it may have been quite substantial in the central core submarket. Thus rent review has not worked as an affordability policy, except in a marginal way. We believe, however, that tightening the program in order to make it have a substantial effect on market rents would be a mistake. The small inefficiencies it has induced would grow greater. Even retaining the program in its present form will probably do damage, especially if housing demand and the rate of inflation rise. This likelihood has been increased by the 1982 amendment to the program, which substantially eliminates an escape hatch for property owners.

The distribution effects of the rent review program have been mixed. The program has almost certainly helped poor elderly renters in Toronto and some other cities. But it has probably hurt low-income families, because even when rents are only slightly below market levels landlords generally find it profitable to refuse to accept high-cost tenants; thus low-income families may have been forced into the exempt sector or into submarkets where there have been

illegal increases. Furthermore, rent review has probably helped many middle-income and a few upper-income renters at the expense of residential property owners -- especially the law-abiding owners of large rental buildings -- and at the expense of the taxpayers as a whole.

Despite our view that rent review has acted only marginally as an affordability policy, we would not argue that there should be no rent regulation. We believe there should be protection against unconscionable rent increases. This protection may be particularly important for low-income renters, since they have so few resources with which to cushion the impact of such increases; and among the low-income group the elderly, because of their high moving costs (broadly interpreted), are especially vulnerable.

Of the two proposals put forward in this paper for dealing with rent increases, we would choose the one that would allow, as a right, an increase considerably larger -- one and one-half times larger, perhaps -- than the average market increase in the previous year. We would call this a threshold rent, but any name other than "guideline" would help to distinguish the program's intent from that of the current system; indeed, the threshold rent might be called "X times the guideline rent" (where X might be 1.5). In addition, this proposal would allow cost pass-through on a more restricted basis than the present one. Increases in financing costs would not be allowed if they resulted only from resale, and other cost increases would be allowed to

increase rents only if they were too great to be passed through over two or three years without exceeding the threshold rate of increase.

The threshold rate of increase would, we expect, only rarely be one that a landlord would wish to exceed. We believe that requiring a landlord to wait a year or two to fully pass through extraordinary cost increases would do little damage to efficiency and that it would, in effect, result in a sharing between landlords and tenants of adjustment costs.

APPENDIX 1: HIFE RENT DATA

Rent data in the HIFE samples of household interviews form the basis for the housing affordability calculations presented in this paper. The notion of "rent" may seem innocent enough to the reader. However, ambiguities arise in measurement. Any survey, such as those on which HIFE is based, attempts to resolve such ambiguities in its own particular way. It is useful, therefore, to briefly consider just how the notion of "rent" is defined in HIFE. This helps us to better understand the limitations and implications of the housing affordability calculations.

Every two years, Statistics Canada creates a public use HIFE dataset by merging data from three different surveys that use the same sample of households. The following describes construction of the 1982 dataset. In 1982, Statistics Canada undertook the Survey of Consumer Finances (SCF) and the Survey of Household Facilities and Equipment (SHFE). The SCF was piggybacked onto the April Labour Force Survey (LFS); each person responding to the LFS was requested to also complete the SCF. The SHFE was similarly piggybacked onto the May LFS. The LFS is a rotating panel study; individuals remain in the sample for six consecutive months before they rotate out. The SCF and SHFE are administered to the same subset: about two-thirds of the full LFS sample. In addition, Statistics Canada collected a Rent Schedule (RS) as a monthly supplement to the April LFS.

Thus every renter household included in the SCF and SHFE was also included in the RS.

Statistics Canada makes available a public-use HIFE microdata sample which contains detailed information about the individual households. Since Statistics Canada cannot release information that might identify any individual, data on the location of the household (other than by province and size class of city) are omitted. Also, records corresponding to high-income households have been deleted.

HIFE samples cover all "private" households in Canada; they exclude individuals or families living in institutional quarters (e.g., barracks, hospitals, communes, and staff or student residences). The HIFE samples are also stratified; they are intended to cover all private households in Canada except those on Indian Reserves and in the Yukon and Northwest Territories. Each sampled household is assigned a weight used to "blow up" sample data to give population estimates. The data in this paper are based on these blown-up counts.

In the LFS, the household is asked if the dwelling is owned by any household member. If the answer is negative, the household is assumed to be a renter. Owner-occupiers of dwellings in multiple-dwelling structures under a co-ownership arrangement (e.g., condominiums and co-operatives) are also owners. However, people living in condominiums that are not yet registered are coded as renters. In HIFE, a renter is defined as any other household. This designation includes, along with regular renters, households (i) living

rent-free, (ii) paying some or all rent in kind, or (iii) in a share-cropping arrangement.

In the RS, each renter is asked the rent paid in the preceding month. The question is no more specific than that. For example, it does not ask the respondent to include in (or exclude from) rent expenditures for utilities, heat, parking, cable television, and so on. The respondent is apparently free to either include or exclude such amounts. The questionnaire subsequently asks what kinds of services are included in the rent. However, this makes it difficult to compare households. One renter who does not include utilities may appear to have a lower rent than his next-door neighbour, even though their expenses are the same.

For several reasons, the rent paid by a household may not bear much relationship to its ability-to-afford. For example, the dwelling may be used for both business and living accommodation. Or it may be occupied by "subsidized" renters. In the 1976, 1980, and 1982 HIFE samples, this category included households whose rent was subsidized by government or an employer. Households in senior-citizen, low-income, and co-operative housing all fell into this category, as did living quarters provided for superintendents or other employees. The 1980 and 1982 HIFE samples also counted as subsidized households whose rent was paid in full or in part by a relative. Note, however, that the rent was considered to be unsubsidized if the household received only financial aid, not a direct rent reduction. The

calculations in this paper are based strictly on unsubsidized renters as defined here. In practice, it is extremely difficult to draw a clear line between unsubsidized and subsidized accommodation. This problem has been exacerbated by the change in definition of "subsidized", in 1978, to allow for subsidization by a relative.

APPENDIX 2: INCOME AND ABILITY TO AFFORD

The calculations in this paper are based on household income data from HIFE. These income data include wages, salaries, net income from self-employment, other investment income, family allowances and other social assistance, pension income, and other money income.

At first glance, this list appears to be comprehensive. However, there are several noteworthy exclusions, among them (i) one-time money gifts from persons outside the household, (ii) inheritances, (iii) lump-sum payments of life or property insurance, (iv) windfall gains, and (v) capital gains. The list also excludes two items that are clearly not part of income but that contribute to cash flow: (vi) money receipts arising from the liquidation of assets and (vii) money receipts or imputed receipts arising from an increase in indebtedness. These omissions indicate that some measure of ability-to-afford other than the one used in HIFE may be a more appropriate basis for housing affordability calculations.

What are the alternatives? Let us briefly consider three: cash flow, permanent income, and wealth. Our purpose here is simply to indicate that these are viable alternatives to income as measured in HIFE.

The Family Expenditure Survey (FAMEX) undertaken by Statistics Canada is based on an accounting identity between a spending unit's cash flow ("source of funds") and its disposition of funds (or total expenditure). Cash flow is defined as the spending unit's income (as defined in HIFE) plus other money receipts (categories i to v above) minus net change in assets less debts (categories vi and vii above). Thus cash flow does take a broader view of the funds available to the household than does the HIFE income definition.

Is cash flow -- or, equivalently, total expenditure -- better than income as defined in HIFE as a measure of ability-to-afford? Although cash flow is an attractive alternative, there is a potential problem with this measure. Consider the example of a spending unit with a $20,000 income and no other money receipts or any changes in assets or liabilities. If the unit spends $15,000 and puts the remaining $5,000 into a savings account (i.e., increases its assets), its cash flow is $20,000 (income) + 0 (other money receipts) - $5,000 (net change in assets minus debts) = $15,000. In other words, its cash flow is equivalent to its expenditure and smaller than its current income. Perhaps one should think of this unit's ability-to-afford as being $20,000 (the amount of money it has available to spend on

goods and services during the year) rather than $15,000 (the amount it actually spends). Or should one? In fact, the unit may be saving $5,000 this year because it intends to make a major purchase next year, or because it anticipates a future drop in income. If so, the unit may well feel that it cannot afford more than $15,000 in expenditures this year. Therefore whether one believes that cash flow is a better measure of ability-to-afford than is income depends on one's view of the consumer's rationale for saving or borrowing.

Consider another example. A student with no current income obtains a loan of $9,000 to go to college for the year. The loan proceeds are spent on shelter, food, tuition, and other living expenses. The current income of this student is zero, but his expenditure is $9,000. Does the latter reflect the student's ability-to-afford? Or is the student merely "exceeding his means" -- able to spend only by increasing his indebtedness? If so, his ability-to-afford is zero. Alternatively, the student (and the lender) can be seen as making a rational investment. The money borrowed for today's consumption will be paid for by a higher income later -- possibly a higher income than the student might have expected to earn with the college education. Thus the student may well be able to afford a $9,000 expenditure this year: it is consistent with his future expected income. For this reason total expenditure -- which is identically equal to cash flow -- is frequently used instead of income in the analysis of expenditure patterns.

When total expenditure is used this way, it is often referred to as a measure of "permanent income", which in essence is the average annual income the consumer expects to receive over his lifetime. Why use this concept rather than current income? Most consumers have some ideas about future changes in their incomes. If they are students or unemployed, for example, they may foresee a rise in their incomes. If they are approaching retirement, they may foresee a drop. If currently employed, they may have some ideas about the likelihood of unemployment or promotion. Rational consumers take these variations in income into account in deciding upon a current level and pattern of expenditure. In other words, current levels of expenditure need not be closely related to current income. Consumers use saving (or, more generally, asset accumulation) or borrowing to even out their patterns of expenditure over time. Loosely, "permanent income" is the income the spending unit behaves as though it had in making current consumption decisions. This is, in fact, another way of expressing the notion of ability-to-afford.

Related to permanent income is the use of wealth as a measure of ability-to-afford. In a broad sense, wealth can be thought to include both the future earnings potential of the spending unit (i.e., its human capital) as well as its current net holdings of financial assets minus liabilities. Decisions to consume are interrelated with decisions to invest; the spending unit may, for example, defer consumption expenditure in order to invest for the future.

To understand how much a consumer is likely to spend on housing requires some consideration of the trade-offs between consumption and investment (or disinvestment).

This discussion illustrates that income, as defined in HIFE, is not the only measure of a household's ability-to-afford. It is important to keep this in mind when thinking about the extent of the housing affordability problem. Some of the housing affordability problems identified using rent-to-income ratios may simply represent an inappropriate measure of ability-to-afford.

APPENDIX 3: LOW-INCOME CUT-OFFS AND THE POVERTY LINE

Low-income cut-offs were initially developed for the 1961 Census Monograph "Incomes of Canadians" and later used by the Economic Council of Canada. The Consumer Income and Expenditure Division published a paper in 1973 entitled "Revision of Low Income Cut-offs" that updated the calculation of low income cut-offs. The present discussion is based on that paper.

In determining low-income cut-offs, the low-income level of living is defined as that income level at which a certain percentage of income is spent on "necessities". As defined here, necessities include food, shelter, and clothing. The underlying rationale is that families of different sizes are at equivalent levels of living when they spend the same proportion of their income on necessities.

Low-income cut-offs are not intended as "poverty lines" but rather as "statistical lines" applicable to an analysis of the characteristics of the low-income population. However, families below the low-income cut-offs are commonly thought to have an affordability problem.

Statistics Canada cautions against interpreting its cut-offs as "poverty lines". Nonetheless, they are there and are commonly interpreted in this way. In Social Planning Council of Metropolitan Toronto (1983), the cut-offs are compared to the estimates of poverty lines developed by the Canadian Council on Social Development and by the Senate Committee on Poverty. Of course, the definition of a poverty line is normative and close attention should be paid to the definition used. Auer and McMullen (1980) also find alternative poverty line estimates to be quite similar, in spite of apparent definitional differences.

Determining the income cut-off level is, of course, fundamentally a value judgement. In 1959, when low-income cut-offs were first calculated, the average expenditure-income ratio for food, shelter, and clothing was 50 per cent. A 70 per cent criterion was chosen as the low-income cut-off. That is, families spending more than 70 per cent of their income on necessities were deemed to belong to the low-income population. In 1969, the average expenditure-income ratio dropped to 42 per cent. In order to maintain the original 20 percentage point difference between the criterion and the overall expenditure-income ratio, the

criterion was lowered to 62 per cent. In 1978, the average expenditure-income ratio dropped still further, to 38.5 per cent, so the 20 point differential rule was reapplied to yield a criterion of 58.5 per cent. However, the original 70 per cent criterion and the subsequent lowerings all represent arbitrary decisions as to what constitutes the low-income cut-off. Specifically, why is it assumed that a 20 per cent differential exists between the average expenditure-income ratio and the ratio defining the low-income population?

A regression approach is used to determine the low-income cut-offs. The variables found to have the greatest effect in determining consumption (C) of food, shelter, and clothing are income (Y), family size (FS), size of place of resident (Z), and geographical region (X). Using a regression approach, one can determine low-income cut-offs that control for the variables that are most likely to affect the consumption level of families. Low-income cut-offs are determined from the estimated consumption model for each size of family and geographic locale.

Statistics Canada estimated a consumption model of the form

$$C = a_i + bY,$$

where a is the intercept that represents the effect on consumption of family size, size of area of residence, and geographical region. A different intercept is calculated

for each demographic and geographic group. The value of b is assumed to be constant. If "c" is the criterion expenditure-income ratio that defines the low-income cut-off, consumption may be expressed as follows:

$$C = cY.$$

This equation simply says that consumption equals 100c% of income at the cut-off income Y. Putting the two equations together yields:

$$Y = a_i/(c-b).$$

This equation gives the income cut-off -- or the income at which the expenditure-income ratio is 100c% for the i'th demographic group. This is the low-income cut-off.

Note that the low-income cut-off approach specifies neither standards for the amounts of necessities to be consumed nor the minimum dollar amount to be spent on them. In other words, it focuses simply on typical expenditures rather than on a minimum budget for adequate consumption.

APPENDIX 4: ALTERNATIVE MEASURES OF THE HOUSING AFFORDABILITY PROBLEM

In this paper, we have considered just the number of renters with an affordability problem and their incidence among all renters, but three other measures of the housing affordability problem in Canada have also been used elsewhere: the Annual Total Gap (ATG), the Annual Average Gap (AAG),

and the Average Gap-to-Income Ratio (AGIR). In all of these measures, a "gap" is defined as the dollar difference, where positive, between rent paid and threshold portion of a spending unit's income. If a unit spends less than the threshold portion of its income on rent, its gap is zero by definition. ATG is the sum of the dollar gaps for all spending units in the cohort. AAG is the typical gap experienced by a unit in the cohort. Finally, AGIR is the average over the cohort of the spending units' ratios of gap-to-income.

These three measures give us additional information about the extent and severity of the housing affordability problem. Instead of focusing on the number of households with an affordability problem, they look at extent of expenditure on shelter in excess of the threshold proportion.

Miron and Cullingworth (1983, 124-31) show that although the number of households with an affordability problem fell between 1976 and 1978, the total dollar gap (ATG) remained the same and the average annual gap per problem household rose about 20 per cent. At the same time, the AGIR per problem household remained the same at about 17 per cent. This means that (i) the number of problem households declined marginally, (ii) the average gap per problem household worsened, but (iii) the increasing gap was matched on average by the increase in income.

NOTES

1. In this paper, the Ontario rent review program is taken as a case of rent control: "rent control" is taken to refer to any regime under which it is possible for rent to be restrained below its market level. "Rent regulation" is taken to refer to rent control or to other forms of rent regulation.

2. Not only does this paper ignore home-owners; it also ignores the ownership market. It is important to note that the existence of this market affects the extent of the affordability problems of renters. Clearly, the lower is the cost of home-ownership, the more important is the home-ownership alternative. For many renters, the long-run solution to the affordability problem would be home-ownership. But many low-income households cannot become home-owners because of the size of the downpayment and the monthly payment.

3. In this paper we refer to households below the Statistics Canada low-income cut-off (see Appendix 3), which we shall call the poverty line, as poor or as low-income households; we refer to households between the poverty line and twice the poverty line as near-poor or as low-middle-income households.

4. It is important to note that these poverty-line incomes increase with household size, so the ratios shown in Table 1 do not relate to a given income.

5. Steele (1979) found income elasticities of demand of low-income renters for 1971 of 0.19 for Toronto and 0.12 for Montreal.

6. To some extent, this is actually required by the method of income classification: the poverty-line area is set at a higher income for large urban areas than it is for other areas. Thus, households at the top of the low-income group must have higher incomes in large urban areas than elsewhere.

7. If a flat 30 per cent criterion is used to determine households with an affordability problem, the difference is much less. The incidence is then 39 per cent for the low-income elderly and 50 per cent for low-income families (computed from 1982 HIFE).

8. This is based on computations from the 1982 HIFE.

9. That is, the poverty line for 1976 (1969 base) inflated to other years on the basis of the increase in the Consumer Price Index.

10. Of course it is conceivable that the incomes and rents of low- and low-middle-income households did not follow the patterns indicated by the averages given here.

11. A further possibility not investigated here is the possible shift of the low-income elderly towards a greater incidence of home-ownership.

12. Among unsubsidized family renters in large urban areas in Ontario who were below the proverty line, 14.3 per cent were crowded in 1976 and 13.9 per cent in 1982; for non-elderly, non-family unsubsidized renters in Ontario who were below the poverty line, the ratios were 3.3 per cent in 1976 and 2.4 per cent in 1982. These ratios are computed from the 1976 and 1982 HIFE's, using estimated 1976 and 1982 incomes respectively, and from a poverty line based on the Statistics Canada low-income cut-off, 1969-base. The crowding indicator defines a household as crowded if there are more than two persons per bedroom.

13. In other words, "willingly" is taken to mean that the household is in long-run equilibrium.

14. Many small landlords live in one unit in a duplex and rent out the remaining unit. In 1974, there were 38,000 owner-occupants of a rental building (Ontario 1978). In addition, of course, there are many landlords who do not occupy their rental building.

15. However, entry can be restricted in certain locations by zoning restrictions. The importance of this depends on the extent to which alternative locations are close substitutes.

16. A market in which there are many producers, freedom of entry, and a product that is not perfectly homogeneous fulfils the assumptions of the monopolistic competition model. Rydell (1979) uses such a model to explain why in the rental housing market much of the adjustment to changed demand comes through a change in the vacancy rate rather than in rent changes.

17. There have in fact been official suggestions that the City of Toronto should positively encourage such conversions.

18. Of course, the bargaining could be in terms of improvements to the accommodation rather than in terms of nominal rent.

19. Presumably a landlord's turnover losses will be lower the lower is the vacancy rate, and vacancy rates are apt to be lower the more constraining is rent review. Further, the more rent review constrains rents below

market level, the less a rent discount is required in order to hold tenants; and the Ontario guideline system discourages discounting for desirable tenants. Nonetheless, in a year when market rents rose, 33 per cent of surveyed non-movers in buildings of less than six units reported a zero rent increase (Ontario 1982, Table 1.7).

20. Friedman and Weinberg started by using Merrill's hedonic regressions (1980); these included variables for tenure conditions, unit quality, unit size, neighbourhood quality, and accessibility and yet explained only 80 per cent of the variance of the log of rent in Phoenix and 66 per cent of it in Pittsburgh. After detailed investigation of the hedonic residual, they concluded that there were some quality components omitted from the Pittsburgh hedonic index, but there was little evidence of omitted quality in Phoenix. In other words, variation in the price of housing service might easily explain something like 20 per cent of the variance in the log of rent, which would, very roughly also be about 20 per cent of the variance in rent.

21. After this was written, we discovered that since the fall of 1983, the City of Toronto Housing Department has, on a trial basis, maintained a list like the one we advocate. Called a "housing registry", it was largely established to help low-income singles who are not eligible for Cityhome housing. Listings are obtained largely through response to regular advertisements in newspapers, but brochures soliciting listings have been distributed in some neighbourhoods. Many of the listings come from home-owners who wish to start renting part of their dwellings; thus the registry can take credit for "creating" many housing units. Accommodation offered is checked to ensure that it is allowed by zoning by-laws and that there are no outstanding work orders that would imply danger to occupants. Accommodation is categorized by structural type, and the size and characteristics of the unit are given. Home-owners are allowed to fully specify the characteristics of acceptable tenants (for instance, they are allowed to specify "no welfare recipients"), but landlords of self-contained units are restricted in their specification by human rights legislation -- which does, however, allow them to specify "no children".

Potential tenants learn of the list through newspaper advertisements, community agencies, and public libraries; listings are posted at the latter locations. Initially, there was no restriction on rents for listed accommodation, but because community agencies believed high rents were discouraging users, rent ceilings were imposed. (The University of Toronto housing service also refuses to list accommodation with rents above

specified ceilings.) The housing registry has been very well received by tenants and community agencies, although single-parent mothers have found it less helpful than have other groups. (We are indebted to Keith Ward of the City of Toronto Housing Department for information; the responsibility for any errors is ours.)

It is of interest that landlords are readily supplying listings to the registry despite the extremely low vacancy rate in Toronto and the lack of any screening of users of the list.

22. A more powerful alternative would be a combined loan and rental insurance agency that would guarantee the rental payments of those who registered with it. There would be a registration fee, and registration would only continue so long as rent payments were kept up and payments were made on any loans outstanding. There is a rough analogy between this proposal and National Housing Act mortgage insurance, which helps households to be acceptable risks for mortgage lenders. (This proposal is based on an idea suggested by John Todd and a referee of this paper.)

    At present, an important way in which many landlords partially insure themselves against rental loss is by requiring a deposit equal to a month's rent. A modest way to increase the accessibility of low-income households to accommodation would be to have the emergency rent fund suggested in the text make loans for the purpose of making a deposit.

23. For Canadian evidence on this point, see note 27 below. For the United States, Ray Struyk (1980) has fully documented the strong association between the financial difficulties of a public housing project and its child population.

24. Some indication of the greater importance of this loss to families than to the elderly is given by the fact that in 1976, in large urban areas in Ontario, an estimated 27 per cent of unsubsidized poor family renters lived in housing built before 1940, but only 9 per cent of unsubsidized poor elderly renters did (estimated from 1976 HIFE using 1969-base poverty line).

25. This last point can be most easily seen by noting that damage to an item in the last year of its life is less costly than damage in the first year of its life. A stain on carpeting due for replacement is less costly than a stain on new carpeting.

26. De Leeuw and Struyk (1975) regard this as sufficiently important to justify making one constraint in their urban housing model: the requirement that any newly

built unit contain a specified minimum amount of housing stock. Also, King (1981) notes that the housing consumption of low-income households may be out of equilibrium because of the constraints of housing codes.

27. The interpretation of the City of Toronto is that the code applies to the newly constructed part of a building and any part of the rest of the building that is affected by the new work.

28. This is the implication of the requirement that there be sufficient wall outlets so that at no point along the floor line is the distance to an outlet more than six feet. This is a requirement of the Ontario Hydro Electrical Safety Code--not the Building Code--administered by the Ontario Hydro. This code applies only to new construction (including additions and alterations).

29. "Central Heating" is defined as furnace heating or installed electric heating. Estimates are from the 1976 HIFE micro data tape, using 1976 estimated incomes; households include owner households as well as unsubsidized renter households. The poverty line has 1978-base.

30. It is possible, however, that the incidence of below-standard housing in rural areas is not a good guide to the preferences of urban dwellers. First, the installation of certain basic facilities is probably more expensive in rural areas. Second, there is some question about the direction of causation: those with low-quality preferences may choose to live in rural areas precisely because low quality is allowed there. But commuting costs will limit the number who make this choice.

    Some evidence on the other side of the argument comes from the United States. "The Experimental Housing Allowance Plan results indicate that many households did not consider their present housing deficient, and would not devote even small sums to repair certain quality deficiences." (Straszheim 1981, 126). Yet these households would have been eligible for a substantial housing allowance if they had undertaken the repairs.

31. The City of Toronto requires that 30 per cent of a lot have ground cover; if a house covers 50 per cent of a lot, this means that 60 per cent of the remaining area must have ground cover. Asphalt and a weedy but trimmed lawn would both qualify, so long as the weeds on the lawn were not noxious. We are indebted to David Breau of the Department of Buildings and Inspections, City of Toronto, for this information; the responsibility for error is ours.

32. However, this is not the stated practice in Toronto.

33. This is the practice in the City of Guelph. In the City of Toronto, illegal work is caught by complaint or by accident; that is, inspectors do not search out illegal work but if they happen to see apparent evidence of illegal work underway, they investigate, whether or not there is a complaint.

34. For full details of the act and a discussion of its administration, see Arnott with Johnston (1981).

35. The basis for this statement is the strong correlation between newness and exemption from rent review in Jazairi's data set. A feeling for the importance of this correlation is given by noting the great change in the statistics associated with the newness variable when the rent review variable is included in the regressions. In particular, when rent is regressed against variables for city district, air conditioning, number of rooms, and newness, the R^2 is .63, the coefficient of newness is 0.0146, and the F statistic is 314; when the variable for rent review exemption is added (and the parking variable is also added), the R^2 rises only to 0.66, the coefficient of newness falls to 0.0112, and the F statistic drops dramatically to 131 (the F statistic for the parking variable is 47).

36. For example, see Kain and Quigley (1975) and Merrill (1980) as cited in Friedman and Weinberg (1982). The statistical significance of this variable is usally very high. For instance, in Merrill's regression (Table 3.2) "length of residence" has a t statistic of 11.57; no other variable except "number of rooms" has a greater t statistic than 7. See also note 19, above, in regard to the remarkable proportion of non-moving renters in Toronto reporting a zero rent increase, suggesting that the length-of-tenure discount has survived rent review.

37. This assumption is supported by the findings of Fallis and Smith (1984). They analyse a model in which consumers purchase in either a controlled market or in an exempt one and find that under most conditions the price of housing service in uncontrolled units exceeds the equilibrium price in the absence of controls. This is supported by empirical evidence: for a two-year period in Los Angeles the average increase was 13.7 per cent for rent-controlled units, and 46.2 per cent for decontrolled units, while the increase in the absence of controls was predicted to be 23.9 per cent.

38. These scenarios could be reversed, if there were sharp cost increases that could result in large rent increases because of the cost pass-through provisions

of rent review. Such increases are apt to occur if interest rates rise substantially.

39. For example, the owners of Colonel By Towers in Ottawa were recently successfully prosecuted (Ottawa Citizen, April 30, 1984, 17). This building is a high-quality building with many long-term middle- and upper-income tenants.

The extent of illegal rent increases has been great enough to attract an entrepreneur: Rent Recovery Service "has recaptured more than $200,000 on behalf of Toronto-area tenants since it was created a year ago" (The Globe and Mail, May 7, 1984, M4). According to the same news story, the owner of the service said that cost deterrents, ignorance, and language barriers prevented tenants from attempting to recover illegal rent increases themselves. There is some indication that the service very largely concentrates its activities on quite large multi-unit buildings; there are obvious cost considerations for doing so.

40. Ontario Ministry of Municipal Affairs and Housing (1982a, Table 3.6 and 1982b, Table 3.5). There may be some bias in these responses because only the opinion of non-movers was reported. Close to 90 per cent of those in the latter survey reported no change, a considerably higher percentage than in the former; the difference may be related to building size -- only buildings with 20 or more units were included in the second survey while all sizes were included in the first. Most landlords claim that over the previous five years there was no change, and of the remainder far more claim improvement than claim deterioration (1982b, Table 3.7).

It is possible, also, that decreased maintenance resulting from rent review may have largely taken the form of reduced decorating and other such activities rather than reduced basic structural maintenance. This would reduce housing service to tenants, but leave the capital value of the building little affected. Passages in a form letter from Campeau Corporation in the spring of 1982 to a tenant at 100 Rideau Terrace in Ottawa, a high-quality building in a prime location, are suggestive: "We will no longer repaint occupied units on renewed tenants every four years. If, after four years, a unit requires a repaint (subject to the approval of the Project Manager), the Corporation will supply the tenant with the required paint, free of charge. However, it will be the tenant's responsibility to do the painting, and upon completion, the unit will be inspected by the project staff.... Cushion floor and/or tile floors will be replaced only as a result of structural repairs to the floor. Otherwise repairs will be made."

41. According to survey evidence, landlords in the private Rent Supplement program strongly prefer elderly households as tenants, especially relative to single-parent families. Of those who encountered problems, 50 per cent reported vandalism problems, 31 per cent reported rule-breaking problems, and 12 per cent reported slow rent [payment] (Ruston, Tomany et al. 1979).

42. It is instructive to note that an ex-developer attributes to inflation some problems generally attributed to rent control. "The fact is you cannot refinance at a level which would permit a moderate increase in rents. You cannot take a building which has been renting at $200 per month and charge $400 next month. This encourages landlords to begin to cut back on services and causes abandonments." (Simons 1981, 50).

43. At present, Royal Trust ordinarily makes mortgage loans on a rental residential property only if (a) the loan is 66 per cent or less of appraised value and (b) rental revenue is greater than the sum of property taxes, interest, and principal repayment. Because the payments in (b) exclude utility and maintenance expense, the (b) constraint permits negative cash flow. In some past periods, however, the cash flow constraint has been tighter. Of course, it is usually possible to generate negative cash flow by using secondary financing when primary lenders have tight constraints.

44. Smith and Tomlinson (1981) attribute one-half the costs of ARP to rent review.

45. In 1977 there were 108,960 apartment and row-housing starts. Assuming that about 20,000 of these were non-rental units (NHA mortgage loans were approved in 1977 for 16,855 condominium units), total rental apartment and row starts were 87,000. Yet loans were approved for 56,905 ARP units in 1977. (Data are from Canadian Housing Statistics 1977, Tables 9, 61, and 73.)

46. Accordingly, of course, it would also depress the value of non-ARP buildings. If they were close substitutes, the reduction in their value below what it would have been in the absence of ARP would be in the $20,000-per-unit region. This is an alternative explanation of Smith and Tomlinson's findings that average price of rental apartments in Toronto rose by only about $2,000 over 1974-80 while condominium apartments rose by about $12,000. They attribute the difference largely to rent review.

47. See the review of evidence in Hanushek and Quigley (1981).

48. For a complete analysis of qualitative distributional effects of rent control based on a theoretical housing model, see Arnott with Johnston (1981); for a discussion of detailed quantitative evidence on the distribution of benefits, assuming the rent paid by every unsubsidized household is affected to the same percentage extent and there is no behavioural response, see Miron and Cullingworth (1983). In addition, see Smith and Tomlinson (1979), for estimates of the costs of rent control borne by the taxpayer.

49. This is the term used by Arnott with Johnston (1981). The term "rent gouging" might also be used; or "rent stabilization" might be used to mean, roughly, the prevention of unconscionable increases.

50. Of course a rational landlord would only set his rent above the market rent of comparable units to the extent that he could exploit his limited monopoly power or because he wished to secure an economic eviction.

51. It might be objected that if rent regulation only applies to continuing tenants, such tenants might be harassed in order to induce them to vacate. But only rarely would landlords gain anything from harassment, in view of the suggested threshold rate of 1.5 times the market increase. There are very substantial costs for landlords associated with turnover, and only when rents are far below market would these costs be offset by the increased rents from new tenants.

52. See previous note.

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